SONY

FLAT WIDE DISPLAY

FWD-42PV1
FWD-42PV1P
FWD-42PV1A

REMOTE COMMANDER
RM-980

SPEAKER SYSTEM
SS-SP42FW

SERVICE MANUAL
1st Edition

⚠警告

このマニュアルは，サービス専用です。
お客様が，このマニュアルに記載された設置や保守，点検，修理などを行うと感電や火災，人身事故につながることがあります。
危険をさけるため，サービストレーニングを受けた技術者のみご使用ください。

⚠WARNING

This manual is intended for qualified service personnel only.
To reduce the risk of electric shock, fire or injury, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so. Refer all servicing to qualified service personnel.

⚠WARNUNG

Die Anleitung ist nur für qualifiziertes Fachpersonal bestimmt.
Alle Wartungsarbeiten dürfen nur von qualifiziertem Fachpersonal ausgeführt werden. Um die Gefahr eines elektrischen Schlages, Feuergefahr und Verletzungen zu vermeiden, sind bei Wartungsarbeiten strikt die Angaben in der Anleitung zu befolgen. Andere als die angegeben Wartungsarbeiten dürfen nur von Personen ausgeführt werden, die eine spezielle Befähigung dazu besitzen.

⚠AVERTISSEMENT

Ce manual est destiné uniquement aux personnes compétentes en charge de l’entretien. Afin de réduire les risques de décharge électrique, d’incendie ou de blessure n’effectuer que les réparations indiquées dans le mode d’emploi à moins d’être qualifié pour en effectuer d’autres. Pour toute réparation faire appel à une personne compétente uniquement.

注意

指定以外の電池に交換すると，破裂する危険があります。
使用済の電池は，説明書に従って処理してください。

CAUTION

Danger of explosion if battery is incorrectly replaced.

Replace only with the same or equivalent type recommended by the manufacturer.
Dispose of used batteries according to the manufacturer's instructions.

Vorsicht!

Explosionsgefahr bei unsachgemäßem Austausch der Batterie.

Ersatz nur durch denselben oder einen vom Hersteller empfohlenen ähnlichen Typ. Entsorgung gebrauchter Batterien nach Angaben des Herstellers.

ATTENTION

Il y a danger d'explosion s'il y a remplacement incorrect de la batterie.

Remplacer uniquement avec une batterie du même type ou d'un type équivalent recommandé par le constructeur.
Mettre au rebut les batteries usagées conformément aux instructions du fabricant.

ADVARSEL!

Lithiumbatteri-Eksplosionsfare ved fejlagtig håndtering.
Udskiftning må kun ske med batteri af samme fabrikat og type.
Levér det brugte batteri tilbage til leverandøren.

ADVARSEL

Lithiumbatteri - Eksplosjonsfare.
Ved utskifting benyttes kun batteri som anbefalt av apparatfabrikanten.
Brukt batteri returneres apparatleverandøren.

VARNING

Explosionsfara vid felaktigt batteribyte.
Använd samma batterityp eller en likvärdig typ som rekommenderas av apparattillverkaren.
Kassera använt batteri enligt gällande föreskrifter.

VAROITUS

Paristo voi räjähtää jos se on virheellisesti asennettu.
Vaihda paristo ainoastaan laitevalmistajan suosittelemaan tyyppiin.
Hävitä käytetty paristo valmistajan ohjeiden mukaisesti.

For the customers in the Netherlands
Voor de klanten in Nederland

Hoe u de batterijen moet verwijderen, leest u in de tekst van deze handleiding.

Gooi de batterij niet weg maar lever deze in als klein chemisch afval (KCA).

Für Kunden in Deutschland

Entsorgungshinweis: Bitte werfen Sie nur entladene Batterien in die Sammelboxen beim Handel oder den Kommunen. Entladen sind Batterien in der Regel dann, wenn das Gerät abschaltet und signalisiert "Batterie leer" oder nach längerer Gebrauchsdauer der Batterien "nicht mehr einwandfrei funktioniert". Um sicherzugehen, kleben Sie die Batteriepole z.B. mit einem Klebestreifen ab oder geben Sie die Batterien einzeln in einen Plastikbeutel.

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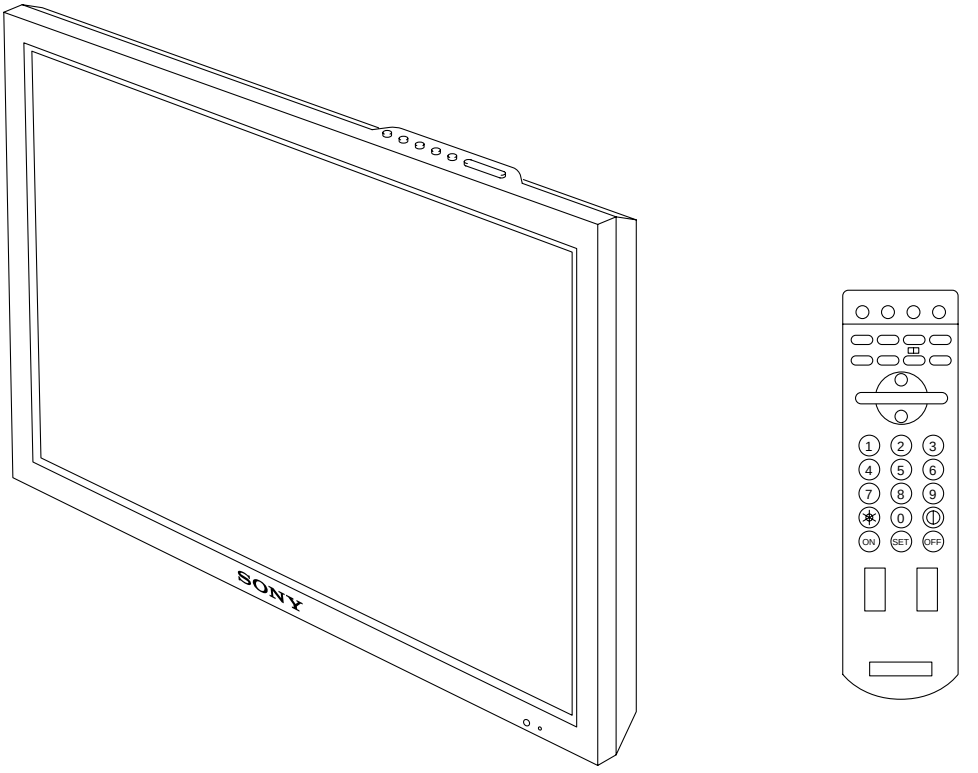
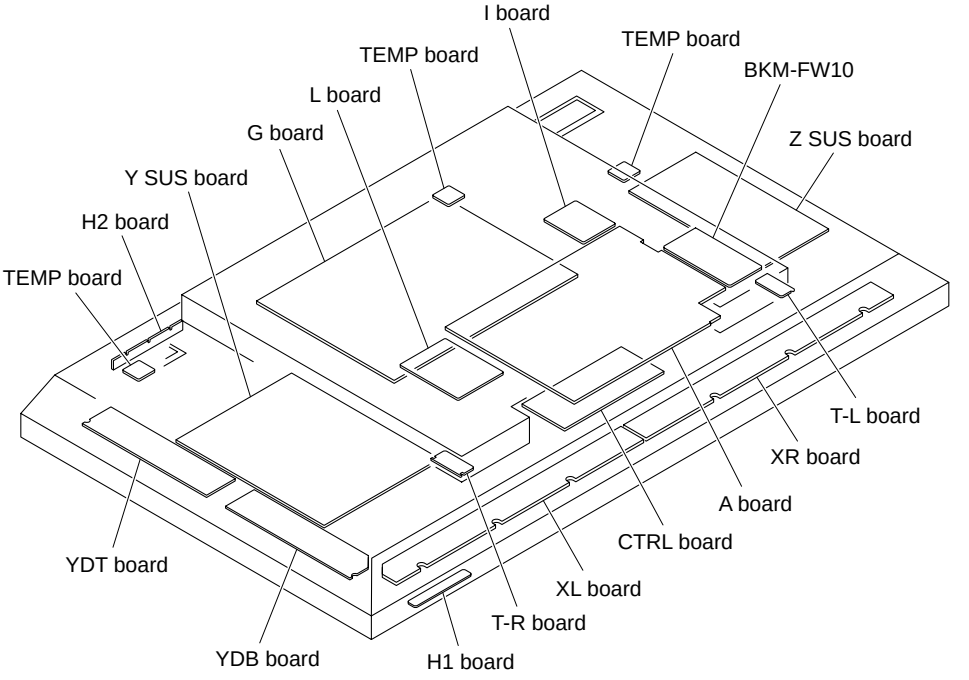
Section 1
Service Overview

1-1. Appearance Figure



1-2. Board Location

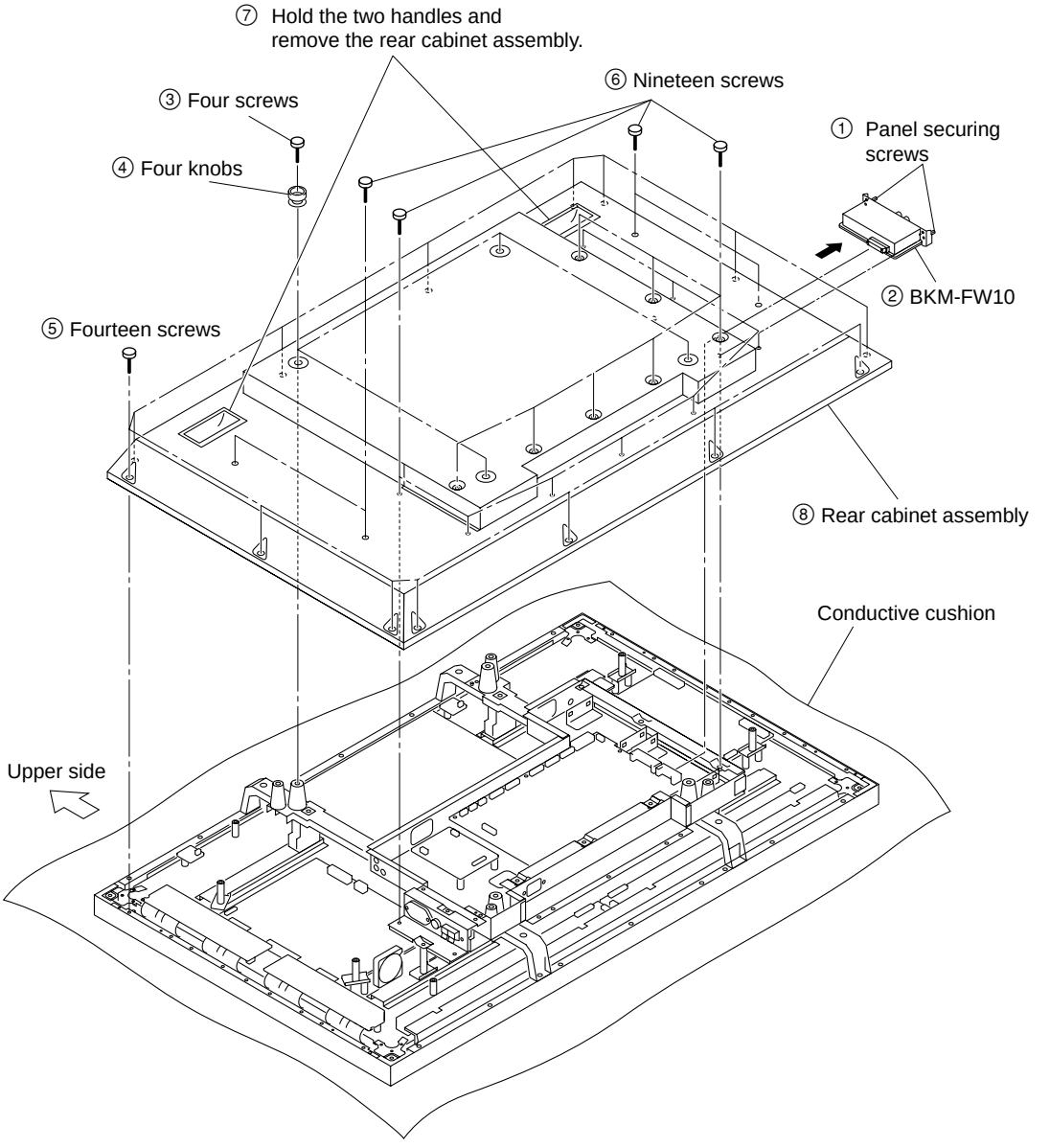


1-3. Disassembly

Note

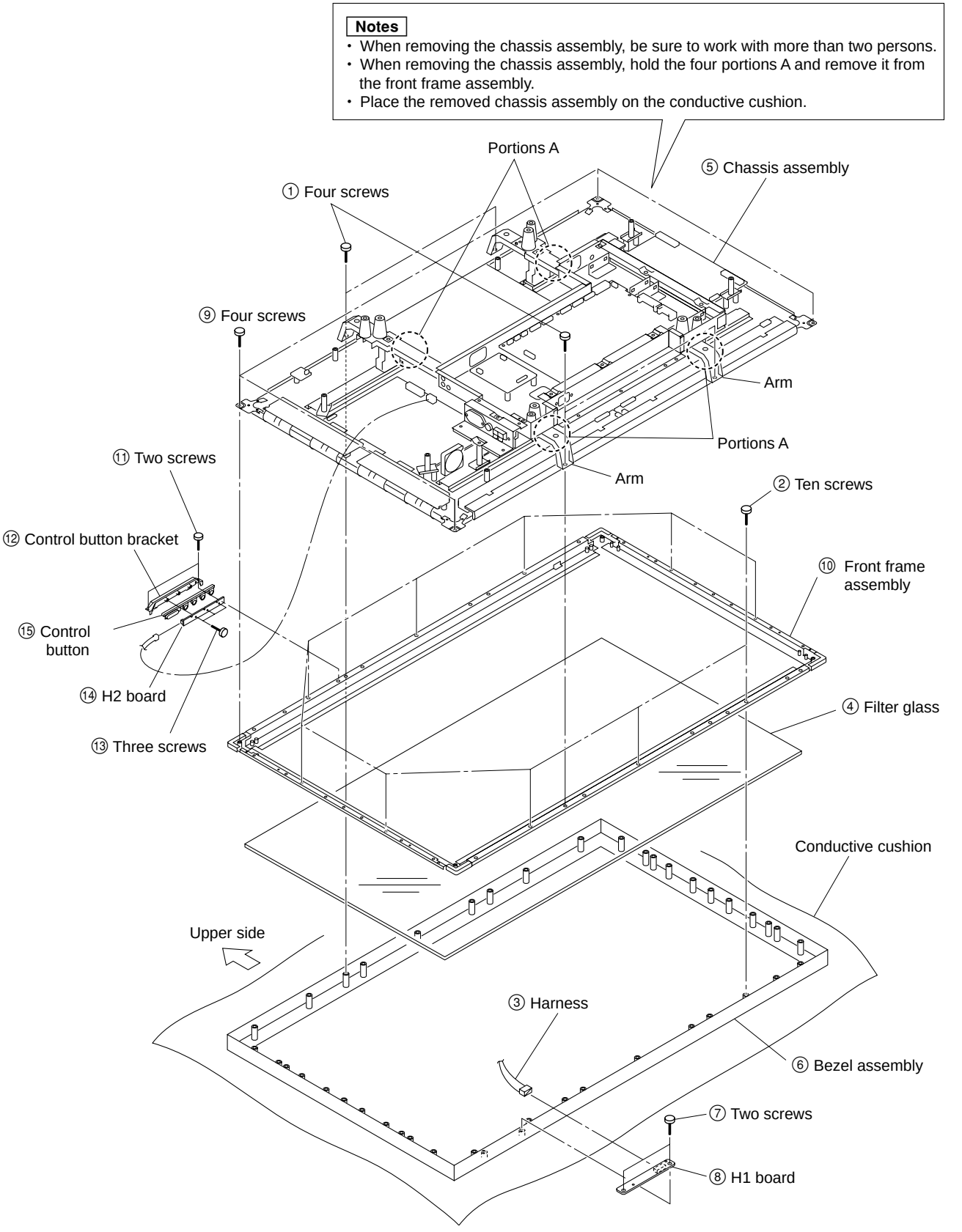
When removing/installing the cabinet and replacing the board, place the unit on the conductive cushion.

1-3-1. Rear Cabinet Assembly



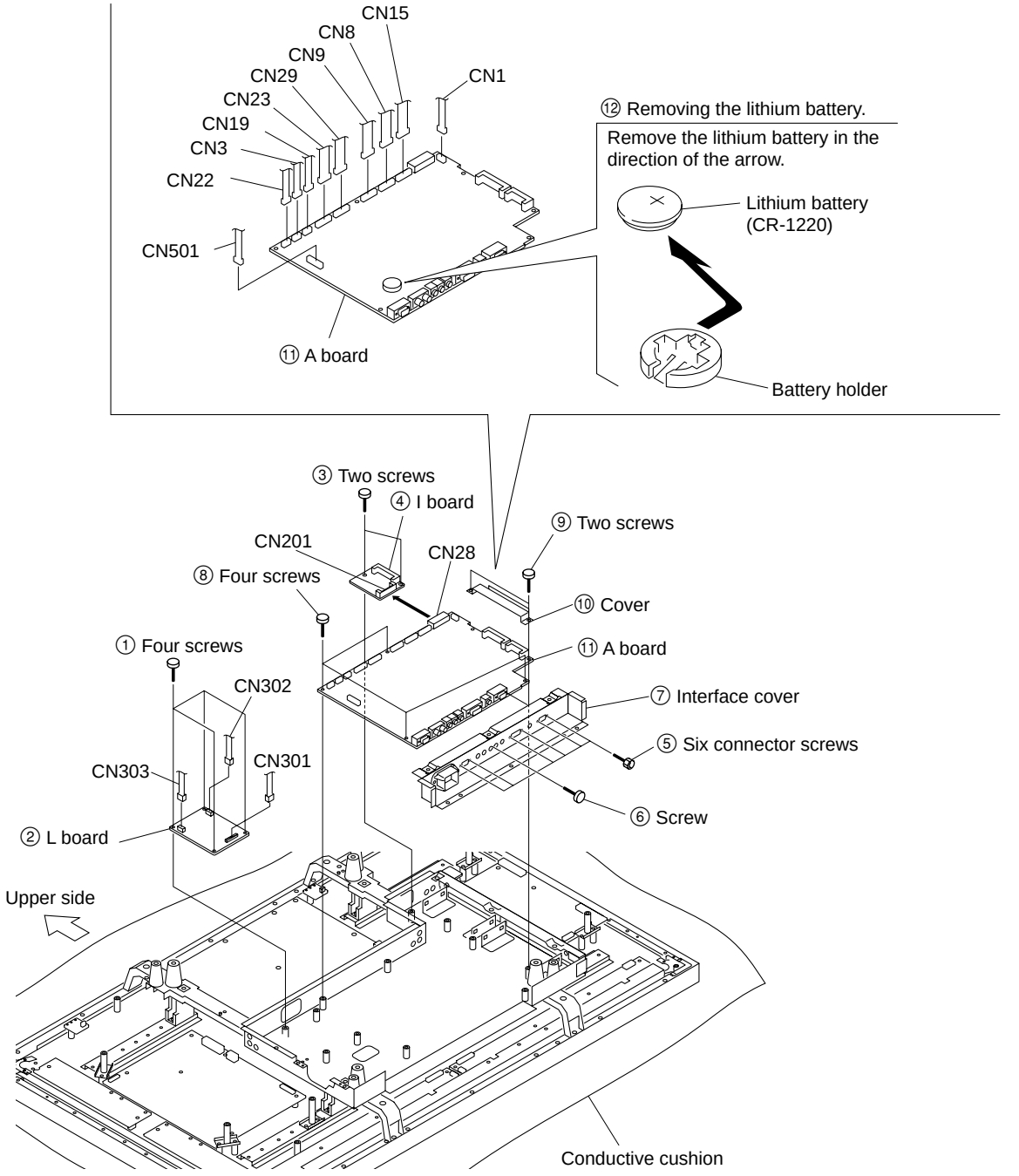
1-3-2. Bezel Assembly/H1 Board/H2 Board

• Remove the rear cabinet assembly. (Refer to Section 1-3-1.)


Notes
• When removing the chassis assembly, be sure to work with more than two persons.
• When removing the chassis assembly, hold the four portions A and remove it from the front frame assembly.
• Place the removed chassis assembly on the conductive cushion.
Portions A
⑤ Chassis assembly
① Four screws
⑨ Four screws
Arm
Portions A
Arm
⑪ Two screws
② Ten screws
⑫ Control button bracket
⑩ Front frame assembly
⑮ Control button
⑭ H2 board
④ Filter glass
⑬ Three screws
Conductive cushion
Upper side
③ Harness
⑥ Bezel assembly
⑦ Two screws
⑧ H1 board

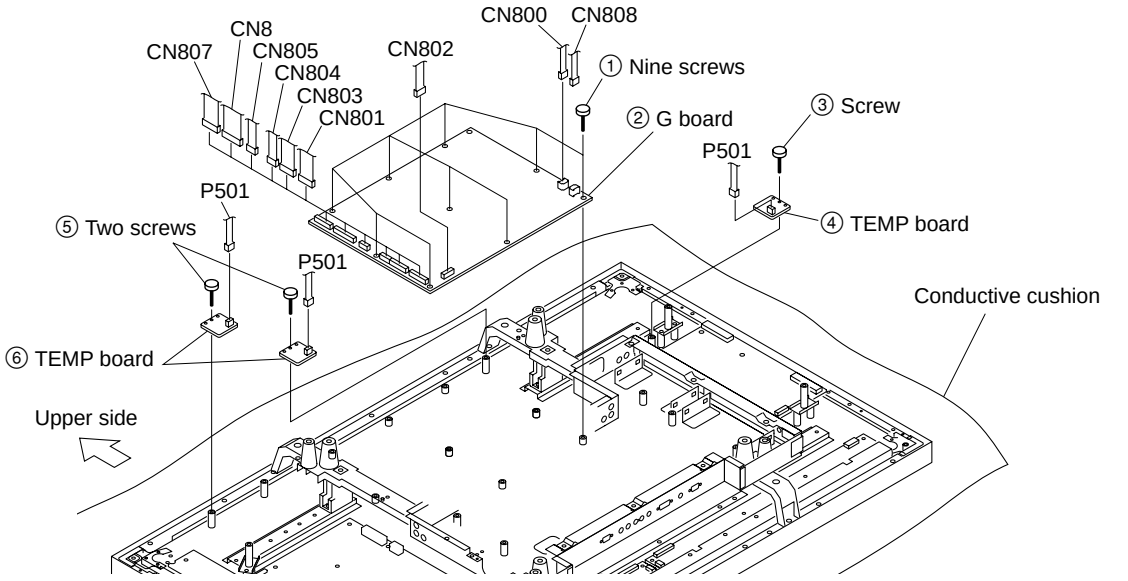
1-3-3. A Board/L Board/I Board

• Remove the rear cabinet assembly. (Refer to Section 1-3-1.)



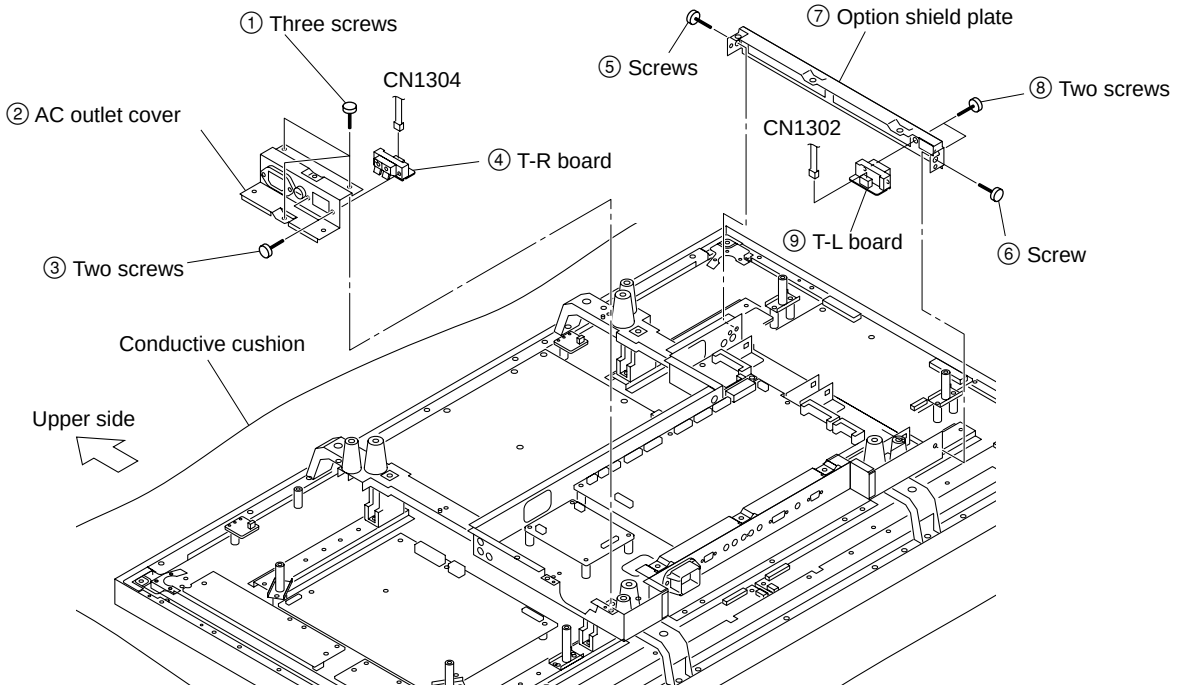
1-3-4. G Board/TEMP Board

• Remove the rear cabinet assembly. (Refer to Section 1-3-1.)



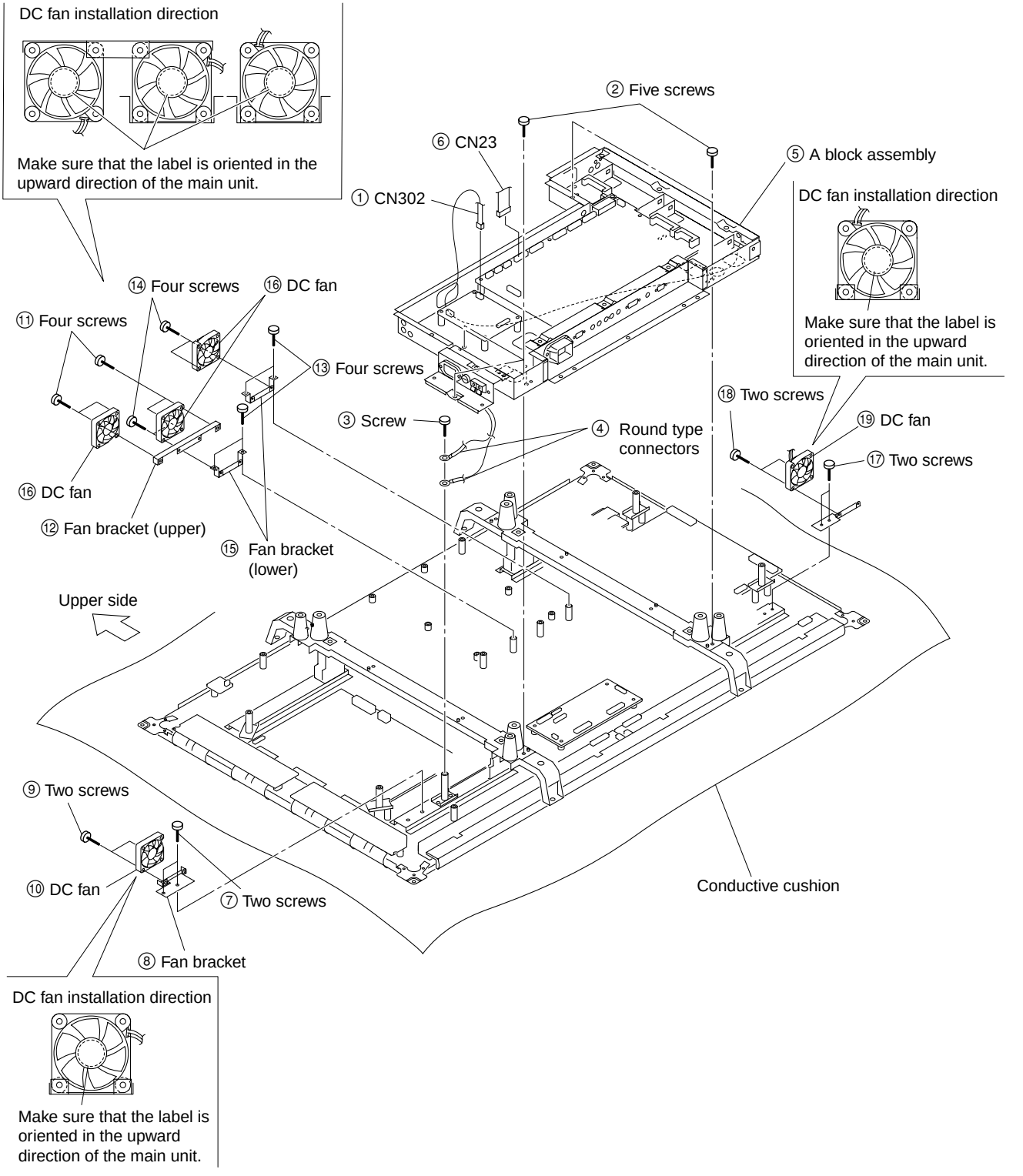
1-3-5. T-R Board/T-L Board

• Remove the rear cabinet assembly. (Refer to Section 1-3-1.)



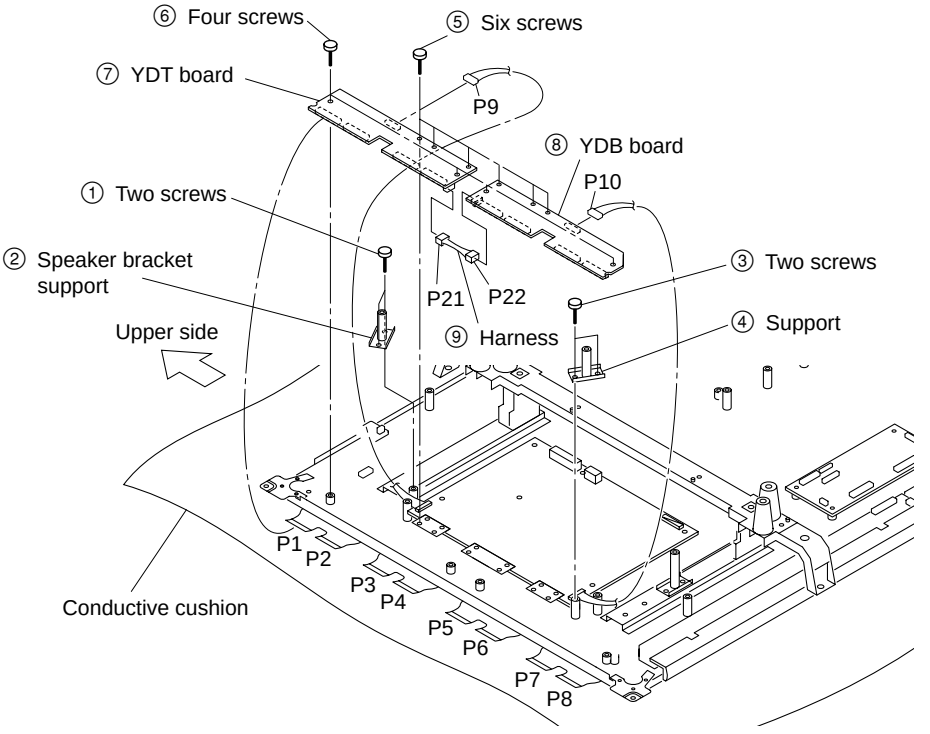
1-3-6. A Block Assembly/DC Fan

- Remove the rear cabinet assembly. (Refer to Section 1-3-1.)
- Remove the bezel assembly. (Refer to Section 1-3-2.)
- Remove the G board. (Refer to Section 1-3-4.)


DC fan installation direction
Make sure that the label is oriented in the upward direction of the main unit.
② Five screws
⑥ CN23
⑤ A block assembly
① CN302
DC fan installation direction
Make sure that the label is oriented in the upward direction of the main unit.
⑭ Four screws
⑯ DC fan
⑪ Four screws
⑬ Four screws
⑱ Two screws
③ Screw
④ Round type connectors
⑲ DC fan
⑰ Two screws
⑯ DC fan
⑫ Fan bracket (upper)
⑮ Fan bracket (lower)
Upper side
⑨ Two screws
⑩ DC fan
⑦ Two screws
⑧ Fan bracket
Conductive cushion
DC fan installation direction
Make sure that the label is oriented in the upward direction of the main unit.

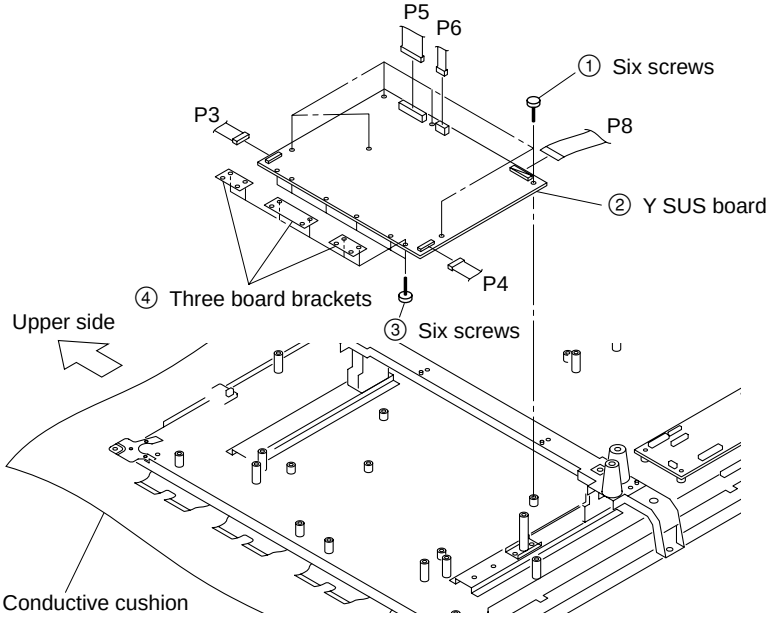
1-3-7. YDT Board/YDB Board

- Remove the rear cabinet assembly. (Refer to Section 1-3-1.)
- Remove the bezel assembly. (Refer to Section 1-3-2.)
- Remove the G board. (Refer to Section 1-3-4.)



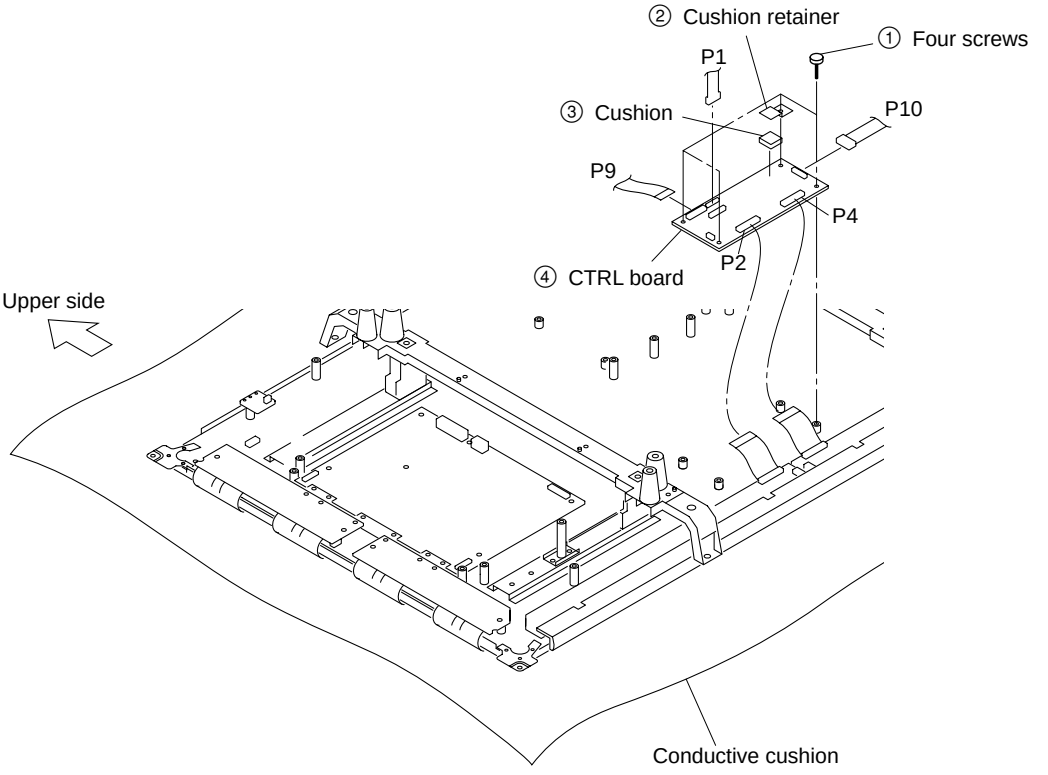
1-3-8. Y SUS Board

- Remove the rear cabinet assembly. (Refer to Section 1-3-1.)
- Remove the bezel assembly. (Refer to Section 1-3-2.)
- Remove the YDT board and YDB board. (Refer to Section 1-3-7.)



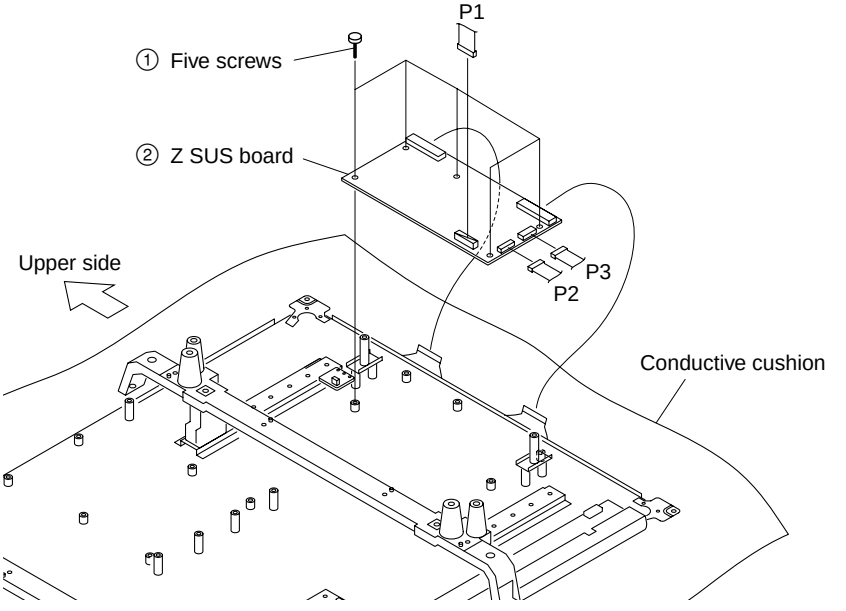
1-3-9. CTRL Board

- Remove the rear cabinet assembly. (Refer to Section 1-3-1.)
- Remove the bezel assembly. (Refer to Section 1-3-2.)
- Remove the A block assembly. (Refer to Section 1-3-6.)



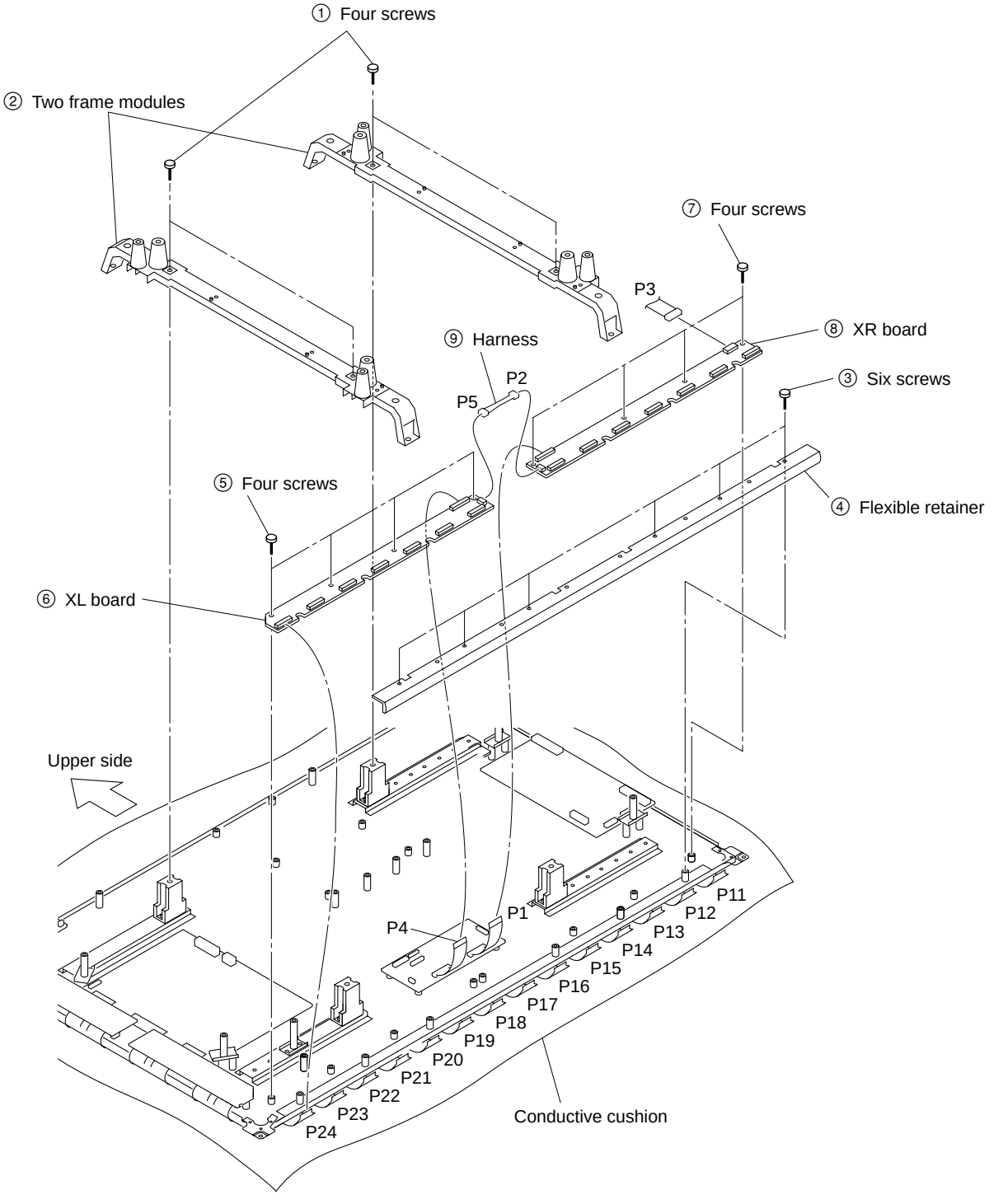
1-3-10. Z SUS Board

- Remove the rear cabinet assembly. (Refer to Section 1-3-1.)
- Remove the bezel assembly. (Refer to Section 1-3-2.)



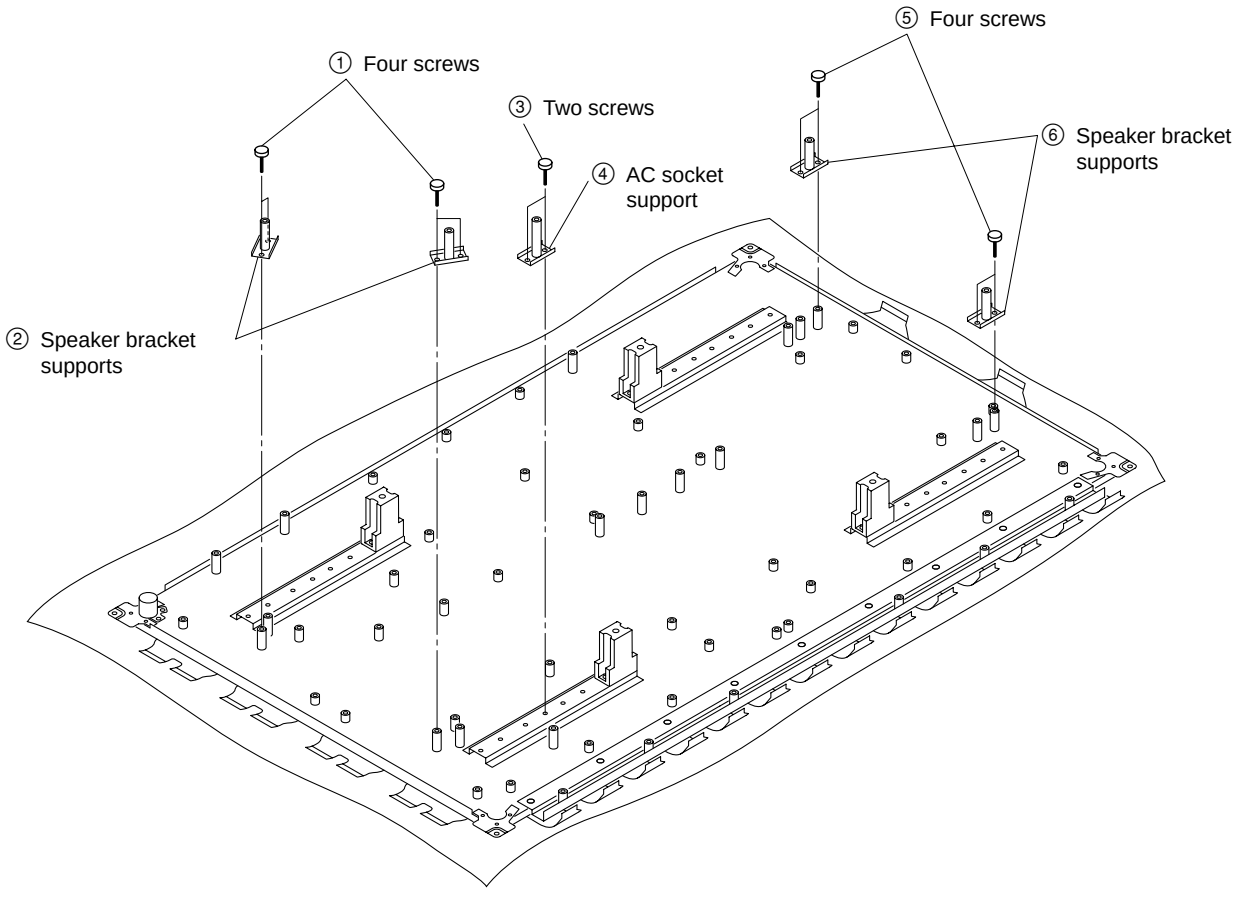
1-3-11. XL Board/XR Board

- Remove the rear cabinet assembly. (Refer to Section 1-3-1.)
- Remove the bezel assembly. (Refer to Section 1-3-2.)
- Remove the G board. (Refer to Section 1-3-4.)
- Remove the A block assembly. (Refer to Section 1-3-6.)



1-3-12. Plasma Display Panel

• Remove each part. (Refer to Sections 1-3-1 to 1-3-11.)

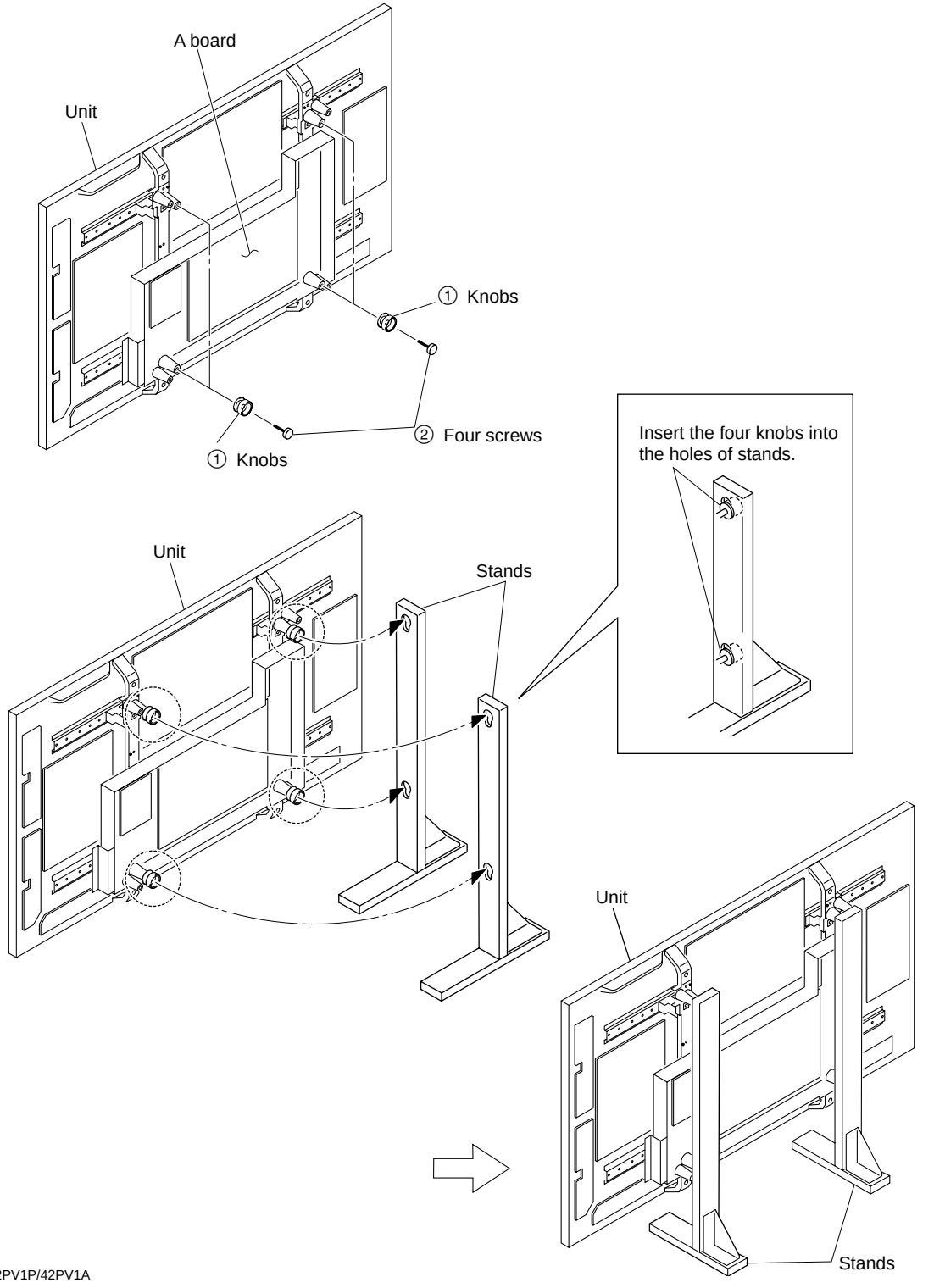


1-4. Service Position

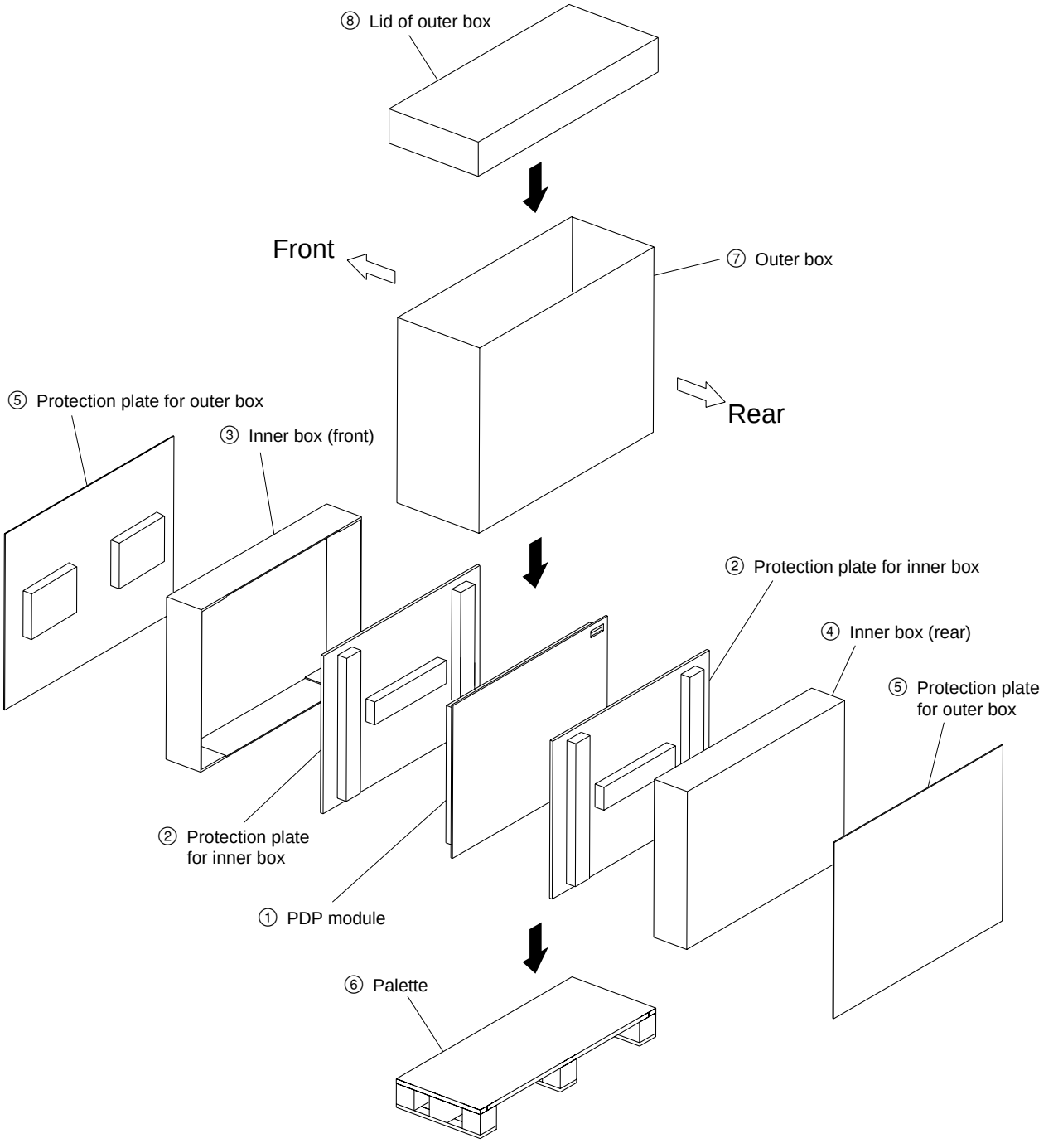
1-4-1. Service Position of A Board

Notes

- When attaching this unit to the stands, be sure to work with two persons.
- After attaching this unit to the stands, make sure that the knobs are securely inserted into the holes of the stands.
- When assembling the service position, be sure to repair after removing the rear cabinet.



1-5. Packing of the Plasma Display Panel



1-6. Warning on Power Connection

Use a proper power cord for your local power supply.

	The United States, Canada	Continental Europe	UK, Ireland, Australia, New Zealand	Japan
Plug type	VM0233	COX-07/636	–[1)]	VM1296
Female end	VM0089	COX-02/VM0310B	VM0303B	VM1313
Cord type	STV	H05VV-F	CEE (13) 53rd (O, C)	HVCTF
Rated Voltage & Current	10 A/125 V	10 A/250 V	10 A/250 V	10A/125V
Safety approval	UL/CSA	VDE	VDE	DENAN-HO

1) Use an appropriate rating plug which is applied to local regulations.

1-7. Unleaded Solder

Boards requiring use of unleaded solder are printed with a lead free mark (LF) indicating the solder contains no lead.
(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size.)

: LEAD FREE MARK

Notes

- Be sure to use the unleaded solder for the printed circuit board printed with the lead free mark.
- The unleaded solder melts at a temperature about 40 ˚C higher than the ordinary solder, therefore, it is recommended to use the soldering iron having a temperature regulator.
- The ordinary soldering iron can be used but the iron tip has to be applied to the solder joint for a slightly longer time. The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful.

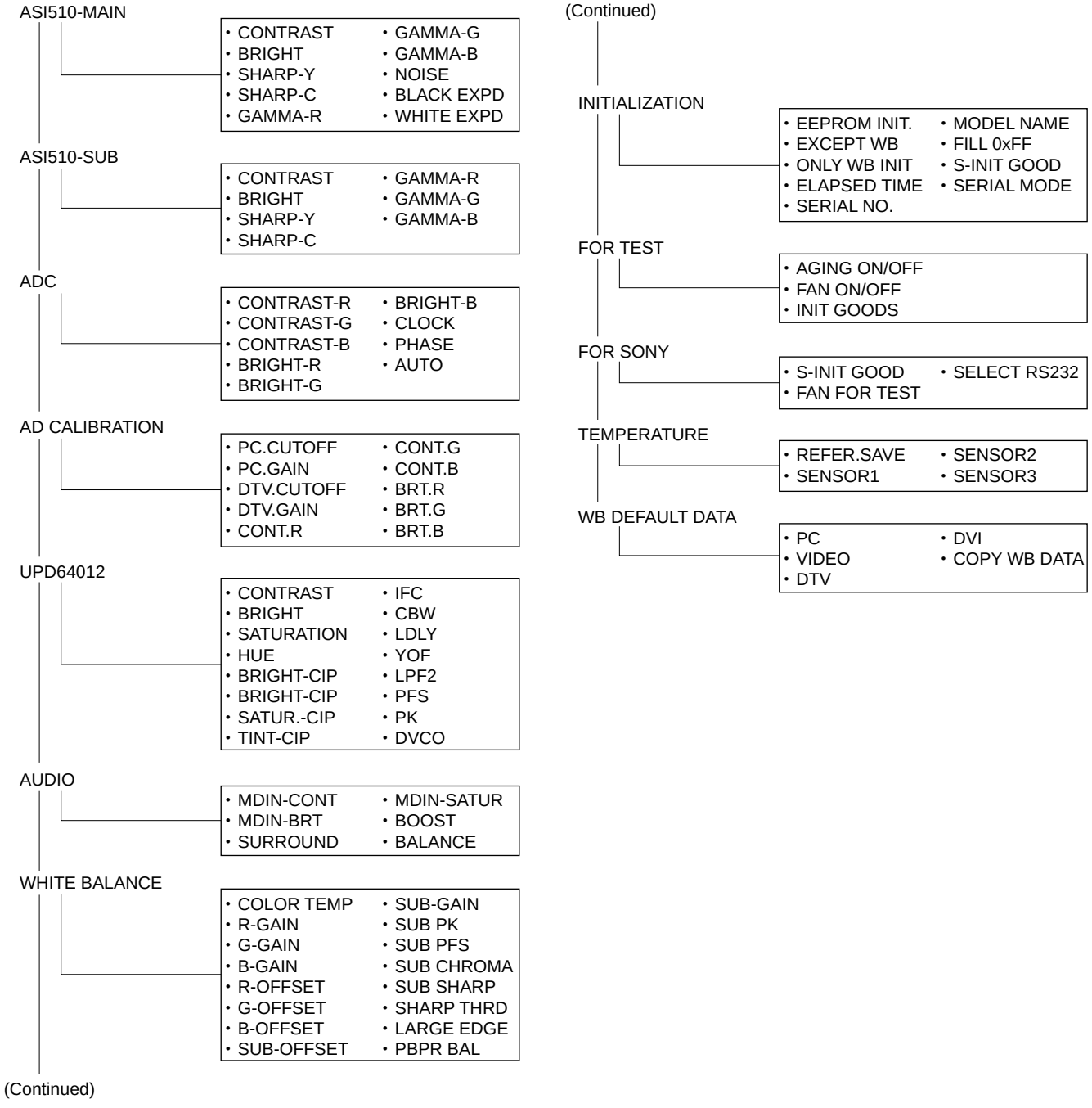
Section 2
Service Mode and Adjustment

2-1. Service Mode

2-1-1. Service Mode Startup Procedure

1. Press the Enter key of the remote controller (RM-980).
2. Enter the number 1 → 8 → 2 in order.

2-1-2. Configuration



2-1-3. Description of Main Items

1. AD CALIBRATION

PC.CUTOFF:	Sets Cut Off of PC mode.
PC.GAIN:	Sets Gain of PC mode.
DTV.CUTOFF:	Not used
DTV.GAIN:	Not used
CONT.R:	Not used
CONT.G:	Not used
CONT.B:	Not used
BRT.R:	Not used
BRT.G:	Not used
BRT.B:	Not used

2. WHITE BALANCE

COLOR TEMP:	Sets color temperature (11000, 9300, 6500).
R-GAIN:	Sets Red Gain (contrast).
G-GAIN:	Sets Green Gain (contrast).
B-GAIN:	Sets Blue Gain (contrast).
R-OFFSET:	Sets Red Offset (brightness).
G-OFFSET:	Sets Green Offset (brightness).
B-OFFSET:	Sets Blue Offset (brightness).
SUB-OFFSET:	Not used
SUB-GAIN:	Not used

3. INITIALIZATION

EEPROM INIT.:	Initializes EEPROM to default data.
EXCEPT WB:	Initializes data except white balance.
ONLY WB INIT:	Initializes white balance data only.
ELAPSED TIME:	Initializes Operation Time.
SERIAL NO.:	Initializes Serial Number.
MODEL NAME:	Initializes Model Name.
FILL 0xFF:	Initializes EEPROM to 0xFF.
SERIAL MODE:	Sets Serial Mode to communicate with the set by using RS-232C. The RS-232C protocol shall be set to SONY.
SONY:	This is for user to control the set by using RS-232C as remote controller.
LG:	This is for setting white balance.
ETC:	This is for developer.

4. FOR TEST

AGING ON/OFF:	Sets Aging Mode on/off.
FAN ON/OFF:	Sets fan on/off.
INIT GOODS:	Initializes whole data for user to be able to use the set.

5. FOR SONY

S-INIT GOOD:	Initializes whole data except Operation Time for user to be able to use the set.
FAN FOR TEST:	Sets fan on/off. **Note** This mode is used for the check in service. The fan is stopped under normal condition. It operates when the temperature inside of this unit rises.
SELECT RS232C:	Select V-net (Slot1/Slot2)

6. WB DEFAULT DATA

PC:	Not used
VIDEO:	Not used
DTV:	Not used
DVI:	Not used
COPY WB DATA:	Not used

2-2. White Balance Adjustment

2-2-1. AD Calibration

Run Auto Calibration in PC (852 × 480@60Hz) signal.

2-2-2. 1PC Signal

1. Start the service mode. (Refer to Section 2-1-1.)
2. Select AD CALIBRATION menu.
3. Input Full Black (No Video) pattern.
4. Run PC. CUTOFF.
5. Input Full White Pattern.
6. Run PC.GAIN.

2-2-3. White Balance

After aging the set about 30 min., adjust color matrix of each color temperature 11000K/9300K/6500K.

Preparation for adjustment

Required equipment

- Signal generator
- Color analyzer (ex: CA100)

Signals

- PC WVGA (852 × 480@60 Hz)
- 1080I (Y/Pb/Pr)
- 480P (Y/Pb/Pr)
- NTSC composite
- PAL composite
- 480I (NTSC component)
- 575I (PAL component)

Signal level

700 mV p-p

Signal pattern

100 % white pattern

Color matrix adjustment

Run the following program sequence in order PC → 1080i → 480p → 480i → 575i → NTSC Composite → PAL Composite.

1. Input Full White Pattern.
2. Setup R-GAIN and R/G/B-OFFSET values of the WHITE BALANCE menu into the following TABLE value.

	PC	1080i	480p	480i	575i	NTSC	PAL
R Gain	33	34	34	34	34	34	34
G Gain	32	33	33	33	33	33	33
B Gain	31	32	32	32	32	32	32
R Offset	61	61	61	61	61	61	61
G Offset	60	60	60	60	60	60	60
B Offset	63	63	63	63	63	63	63

3. Change G-GAIN and B-GAIN values and adjust color matrix.
   11000K: x = 276 (±15), y = 282 (±15)
   9300K: x = 283 (±15), y = 298 (±15)
   6500K: x = 313 (±15), y = 329 (±15)
4. Adjust each color temperature 11000K/9300K/6500K in order repeating steps 3 and 4.

Shipment condition setting

Set up the shipment condition.

1. Start the on service mode.
   (Refer to Section 2-1-1.)
2. After selecting FOR SONY menu, run S-INIT GOODS. When the setting is completed, the unit becomes ON state automatically after power ON/OFF.

2-3. Va/Vs Voltage Adjustment

2-3-1. Required Equipment

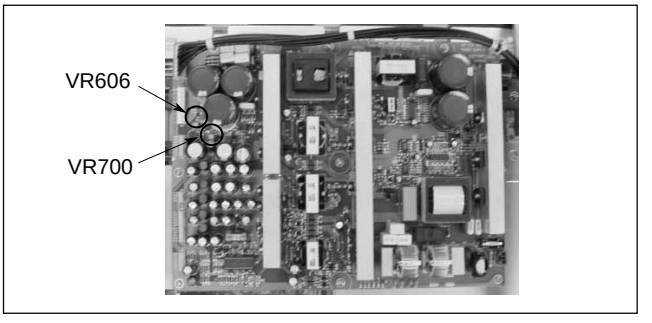
- Digital multi meter
- Signal generator
  Input signal: Input1 (RGB, D-Sub) 852 × 480@60 Hz (Recommended pattern), 100 % white pattern

2-3-2. Vs Voltage Adjustment

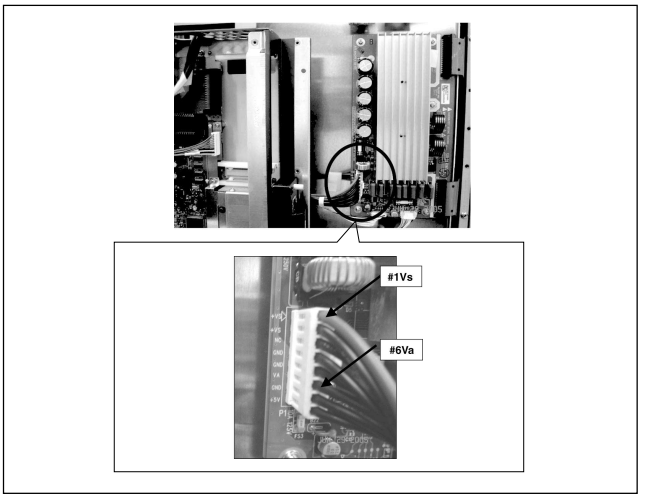
1. Check the label on the right upper side of PDP panel
2. Turn the volume (⊘VR600) to be "Vs Voltage" on the label.
   It is normally set in the range between 180 V and 195 V.

2-3-3. Va Voltage Adjustment

1. Look at the label on the right upper side of PDP panel
2. Then turn the volume (⊘VR700) to be "Va Voltage" on the label.
   It is normally set in the range between 55 V and 65 V.



Measurement point
(Connector that is connected from the G board to the Z SUS board)



2-4. Vsc/–Vy Voltage Adjustment

After replacing the Y SUS board, perform the adjustment in this section.

2-4-1. Required Equipment

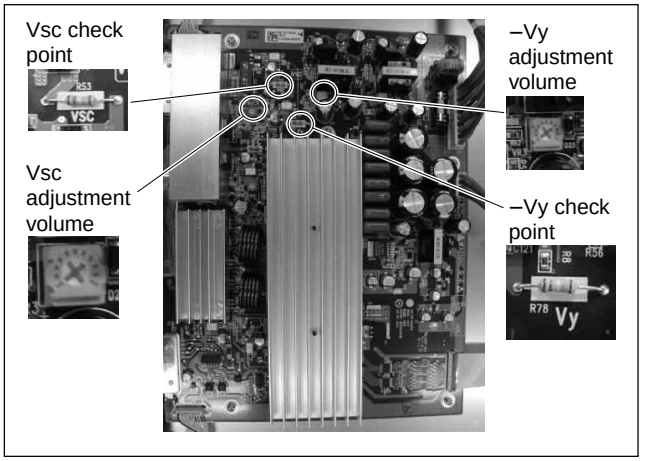
- Digital multimeter
- Signal generator
  Input signal: InputI (RGB, D-Sub) 852 × 480@60 Hz (Recommended pattern), 100% white pattern

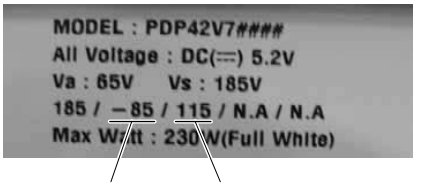
2-4-2. Vsc Voltage Adjustment

1. Perform the adjustment so that the following specification is satisfied.
   Adjustment point: R53
   Specification: See below

2-4-3. –Vy Voltage Adjustment

1. Perform the adjustment so that the following specification is satisfied.
   Adjustment point: R78
   Specification: See below





–Vy specification value Vsc specification value

Note

The above is a label sample.
Check the actual model for the actual specification value.

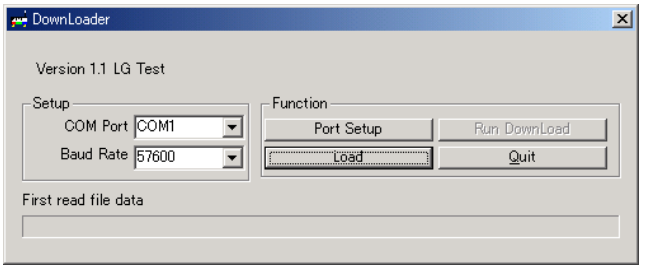
2-5. Firmware Version Upgrade

Perform the firmware version upgrade using the ISP program.
When the firmware version upgrade is required, a technical memo is issued.

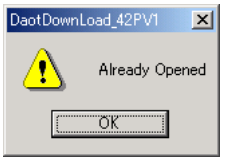
Note

Windows 2000 and later is recommended as the personal computer (PC) OS.

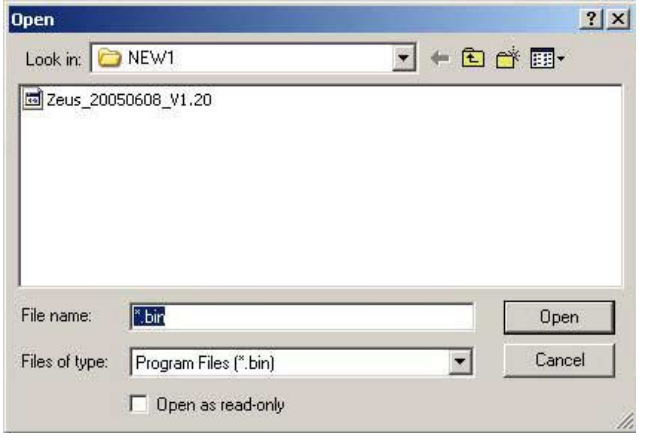
1. Connect this unit with PC using the RS-232C cable.
2. Disconnect the AC power cord of this unit.
3. Copy the ISP program to the arbitrary folder.
4. Start the ISP program.



5. Set the port to the setting as displayed on PC.
   In the above screen, set the port to “COM1”.
6. Click the Ports Setup button.
   Check that “OK” is displayed.



7. Click the Load button.
8. Open the ****.bin file.



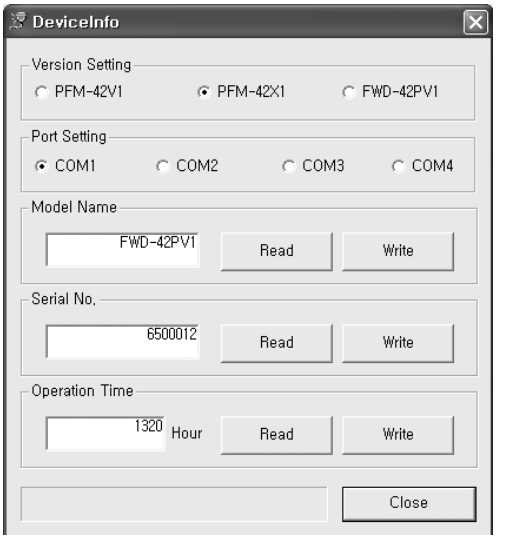
9. Click the Run DownLoad button.
   The progress bar under the dialog box changes to “Ready Signal” and the unit goes into standby state.
10. Connect the AC power cord to this unit. The version upgrade starts.

2-6. DEVICEINFO Section

1. Connect PC to PDP using the serial cable.
2. Set the port.
   (1) Select the model. (FWD-42PV1)
   (2) Select the port. (COM1, COM2, COM3 or COM4)

   Note

   The initial setting is COM1.
3. Click the Read button in “Model Name”.
   (Data reading)
   If the data reading is completed successfully, the setting in the port that has been selected in step 2 can be performed. If not, return to step 2 and select another port. Then, perform the data reading again.
4. Data writing
   Modify: Model name, serial number, operating time
   Write: Model name, serial number, operating time



Section 3
Troubleshooting

3-1. Self Diagnosis Operation

Check Items	None V-NET (BKM-FW13)	V-NET (BKM-FW13)
Panel Communication error	Concept: Power Off → LED Blinking 2 times	Concept: Power Off → LED Binking 2 times
FAN Abnormal	Concept: Power On → “FAN NG” message display	Concept: Power Off → LED Blinking 3 times
Temp. Abnormal	Concept: Power Off → LED Blinking 4 times	Concept: Power Off → LED Blinking 4 times
Voltage Abnormal	Concept: Power Off → LED Blinking 5 times	Concept: Power Off → LED Blinking 5 times

∗: There is abnormal state in any of 5 V/9 V/3.3 V/Vs/Va/12V that is output from the G board.

3-2. Check Point

3-2-1. A Board

LED symptoms

1. No LED flashing

Cause 1: G board can’t supply 5 V.
(Check 3 and 4-pins of the CN9 on the A board.)
→ Check the connector, or replace the G board.

Cause 2: Pattern on the A board is short.
→ Replace the A board or H2 board.

2. Only red LED lighting (No power on)

Cause 1: Check the 5 V line from the G board to the A board.
(Check 1-pin of the CN9 on the A board.)
→ If the 5 V line is abnormal, check the connector, or replace the G board. If it is ok, replace the A board.

Cause 2: Micom halt
→ Replace the A board.

3. Only amber LED lighting (No power on)

Cause 1: Micom halt → Replace the A board.

4. Repeated blinking from red to green LED flashing (No power on)

Cause 1: A board is damaged.
→ Replace the A board.

Cause 2: G board can’t supply another voltage.
→ Replace the G board.

5. Blinking red LED many times.

Refer to Section 3-1.

Raster symptoms (If LED is ok)

1. No raster
(First check back raster if plasma display panel is on)

Cause 1: If it is ok, replace the A board.

Cause 2: If it is not, replace the G board or plasma display panel.

2. No raster at special mode.

Cause 1: Replace the A board.

Cause 2: If there is no raster after inputting the DVI signal, check EDID.

3. Abnormal raster

Cause 1: When you change A board, it is abnormal.
→ Plasma display panel has problem.

Sound Symptoms

1. You can’t hear sound output

Cause 1: Check 1 and 3-pins of the CN1 on the L board. If it is ok, replace the L board.
The 3-pin of CN1 is the L/R output terminal of the audio signal. Check the signal using the oscilloscope. If there is no signal, the A board is the cause of the trouble. Otherwise, the L board is the cause of the trouble.

Cause 2: If it is not, replace the A board.

2. Abnormal sound

Cause 1: Replace the L board.

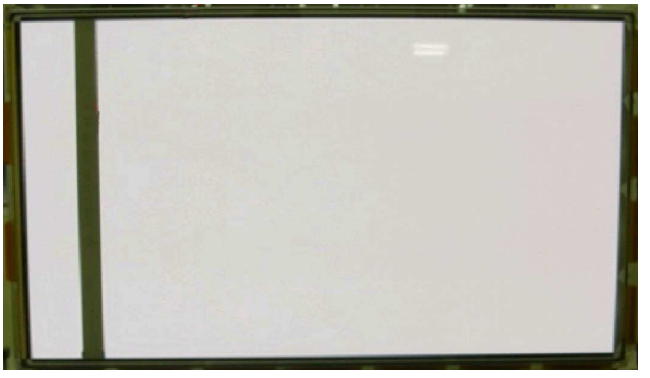
3-2-2. Plasma Display Panel

1. Image is not displayed.

- Check all connectors.
- Check the Exhaust tip.
- Check blink of LEDs on the CTRL board and check the 5 V CTRL voltage.
- Check fuse on the Y SUS board and check Vsc, −Vy, Vs, V5 CTRL voltage.
- Check fuse on the Z SUS board and check Va, V5 CTRL, Vs voltage.

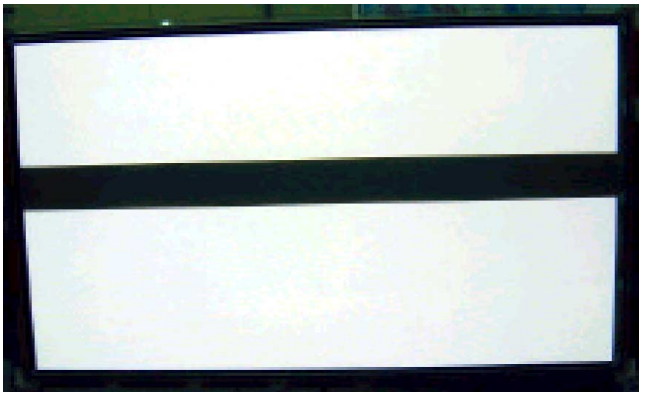
2. Vertical bar failure

- Check all connectors.
- Check peripheral circuit and connecting of the XR and XL borads.



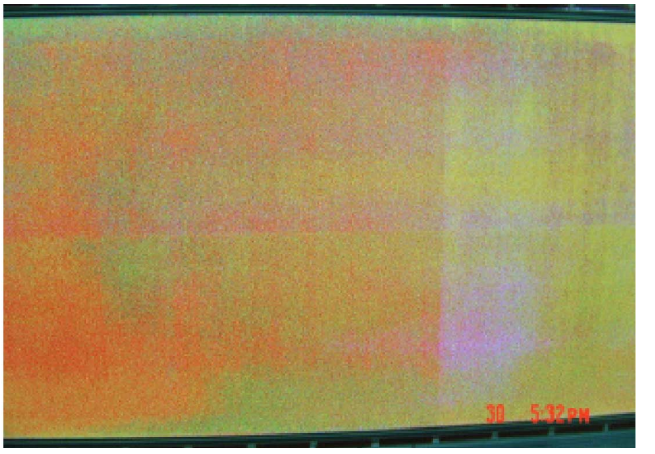
3. Horizontal bar failure

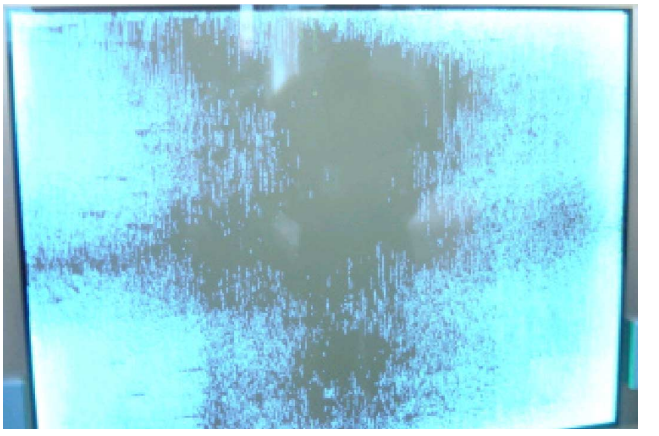
- Check all connectors.
- Check peripheral circuit and connecting of the YDT and YDB borads.



4. Mal discharge

- Check signals of YDT, YDB, and Z SUS boards and check Y SUS board voltage (−Vy, Vsc).
- Check YDT and YDB boards.
- Check CTRL board.





3-3. Image Trouble

Main symptoms

- Dot noise
- Picture noise
- Bad color
- Vertical dot noise
- Unstable image
- No image
- Broken OSD
- No inversion
- No power saving
- Clock error
- No screen saver
- Flashing picture
- Dark picture
- Unstable caption/text

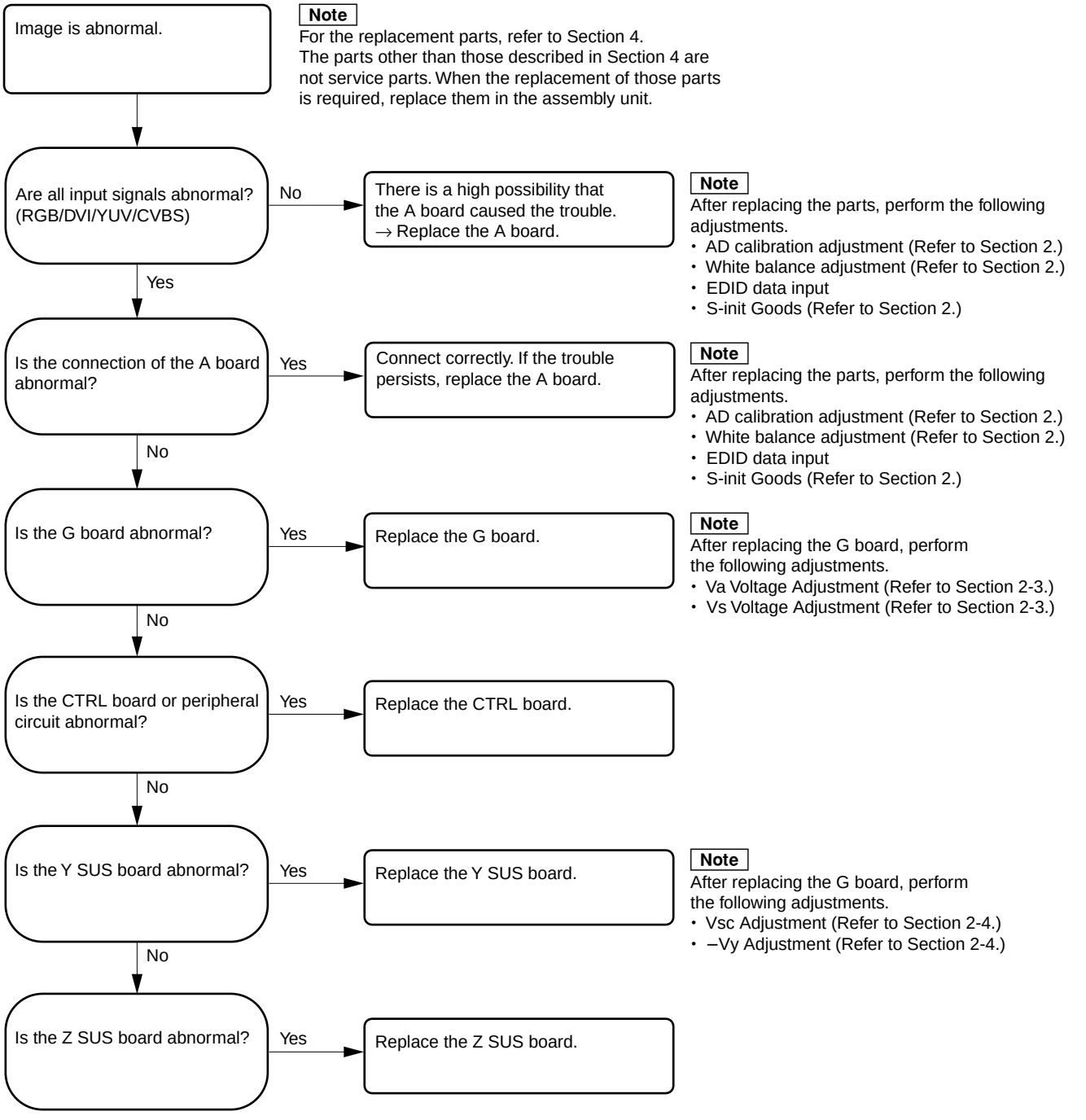
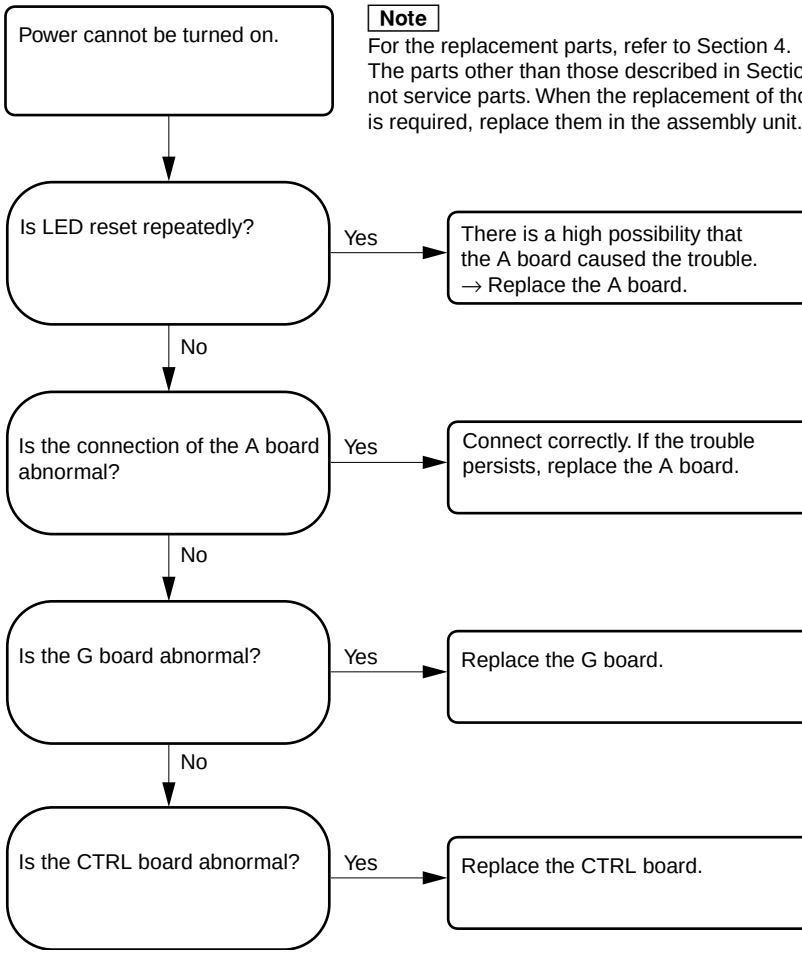


Image is abnormal.
Note
For the replacement parts, refer to Section 4.
The parts other than those described in Section 4 are not service parts. When the replacement of those parts is required, replace them in the assembly unit.
Are all input signals abnormal? (RGB/DVI/YUV/CVBS)
No
There is a high possibility that the A board caused the trouble.
→ Replace the A board.
Note
After replacing the parts, perform the following adjustments.
• AD calibration adjustment (Refer to Section 2.)
• White balance adjustment (Refer to Section 2.)
• EDID data input
• S-init Goods (Refer to Section 2.)
Yes
Is the connection of the A board abnormal?
Yes
Connect correctly. If the trouble persists, replace the A board.
Note
After replacing the parts, perform the following adjustments.
• AD calibration adjustment (Refer to Section 2.)
• White balance adjustment (Refer to Section 2.)
• EDID data input
• S-init Goods (Refer to Section 2.)
No
Is the G board abnormal?
Yes
Replace the G board.
Note
After replacing the G board, perform the following adjustments.
• Va Voltage Adjustment (Refer to Section 2-3.)
• Vs Voltage Adjustment (Refer to Section 2-3.)
No
Is the CTRL board or peripheral circuit abnormal?
Yes
Replace the CTRL board.
No
Is the Y SUS board abnormal?
Yes
Replace the Y SUS board.
Note
After replacing the G board, perform the following adjustments.
• Vsc Adjustment (Refer to Section 2-4.)
• –Vy Adjustment (Refer to Section 2-4.)
No
Is the Z SUS board abnormal?
Yes
Replace the Z SUS board.

3-4. Power (G Board) Trouble


Power cannot be turned on.
Is LED reset repeatedly?
Yes
There is a high possibility that the A board caused the trouble.
→ Replace the A board.
No
Is the connection of the A board abnormal?
Yes
Connect correctly. If the trouble persists, replace the A board.
No
Is the G board abnormal?
Yes
Replace the G board.
No
Is the CTRL board abnormal?
Yes
Replace the CTRL board.

Note

For the replacement parts, refer to Section 4.
The parts other than those described in Section 4 are not service parts. When the replacement of those parts is required, replace them in the assembly unit.

Note

After replacing the parts, perform the following adjustments.
- AD calibration adjustment (Refer to Section 2.)
- White balance adjustment (Refer to Section 2.)
- EDID data input
- S-init Goods (Refer to Section 2.)

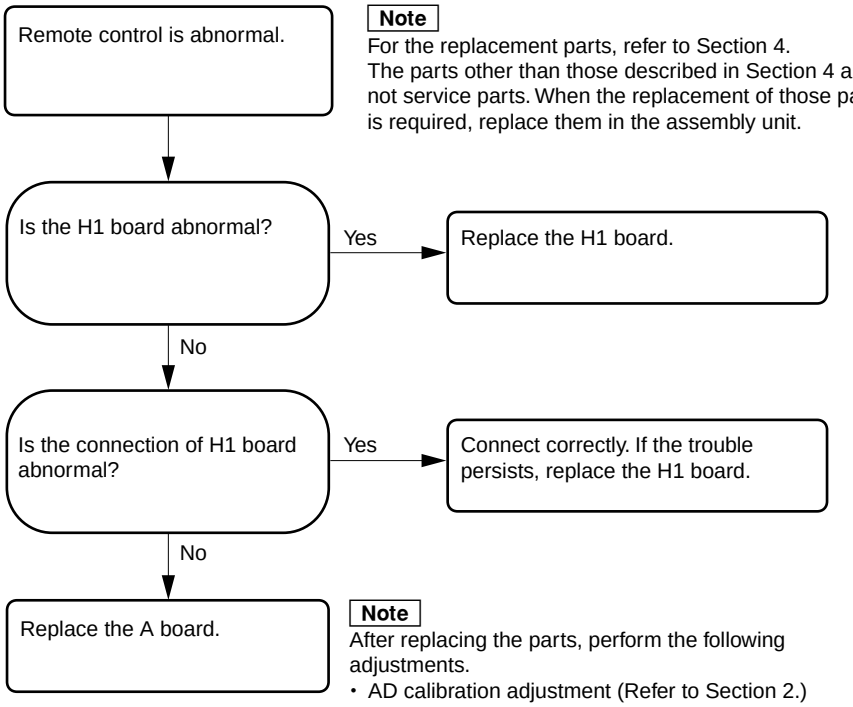
Note

After replacing the parts, perform the following adjustments.
- AD calibration adjustment (Refer to Section 2.)
- White balance adjustment (Refer to Section 2.)
- EDID data input
- S-init Goods (Refer to Section 2.)

Note

After replacing the G board, perform the following adjustments.
- Va Voltage Adjustment (Refer to Section 2-3.)
- Vs Voltage Adjustment (Refer to Section 2-3.)

3-5. Remote Control Trouble



Note

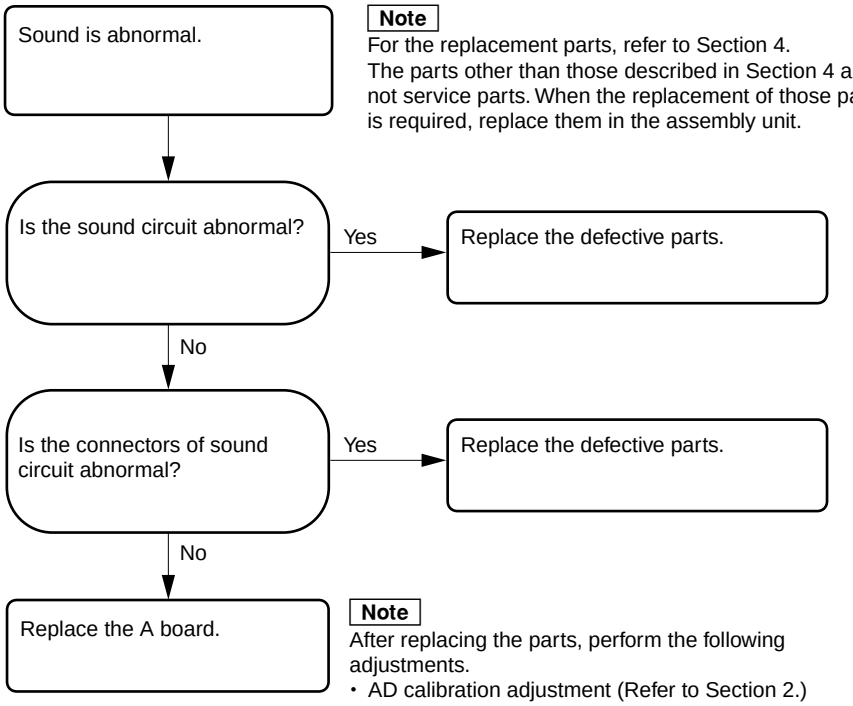
For the replacement parts, refer to Section 4.
The parts other than those described in Section 4 are not service parts. When the replacement of those parts is required, replace them in the assembly unit.

Note

After replacing the parts, perform the following adjustments.

- AD calibration adjustment (Refer to Section 2.)
- White balance adjustment (Refer to Section 2.)
- EDID data input
- S-init Goods (Refer to Section 2.)

3-6. Sound Trouble



Note

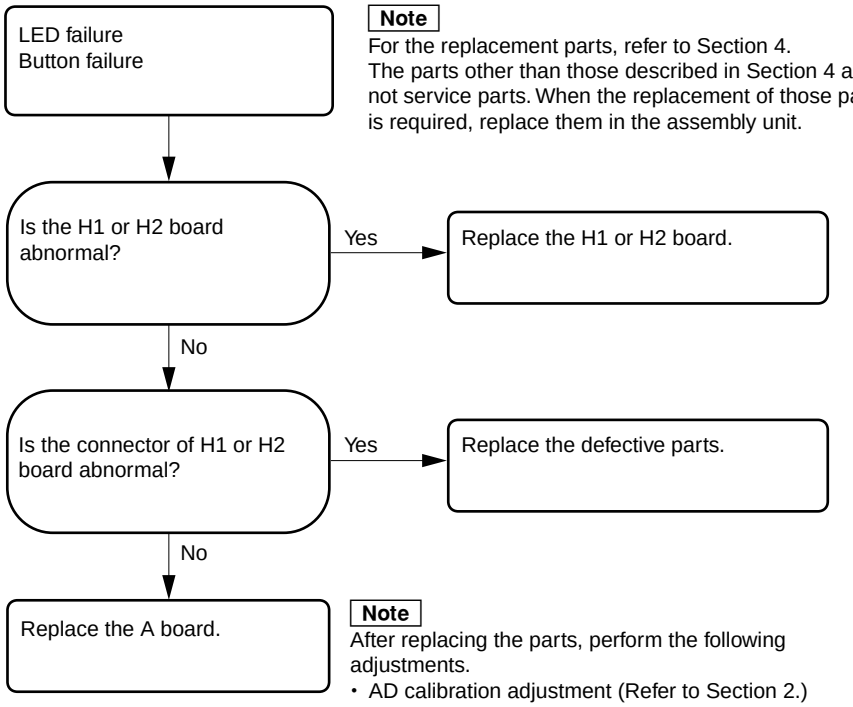
For the replacement parts, refer to Section 4.
The parts other than those described in Section 4 are not service parts. When the replacement of those parts is required, replace them in the assembly unit.

Note

After replacing the parts, perform the following adjustments.

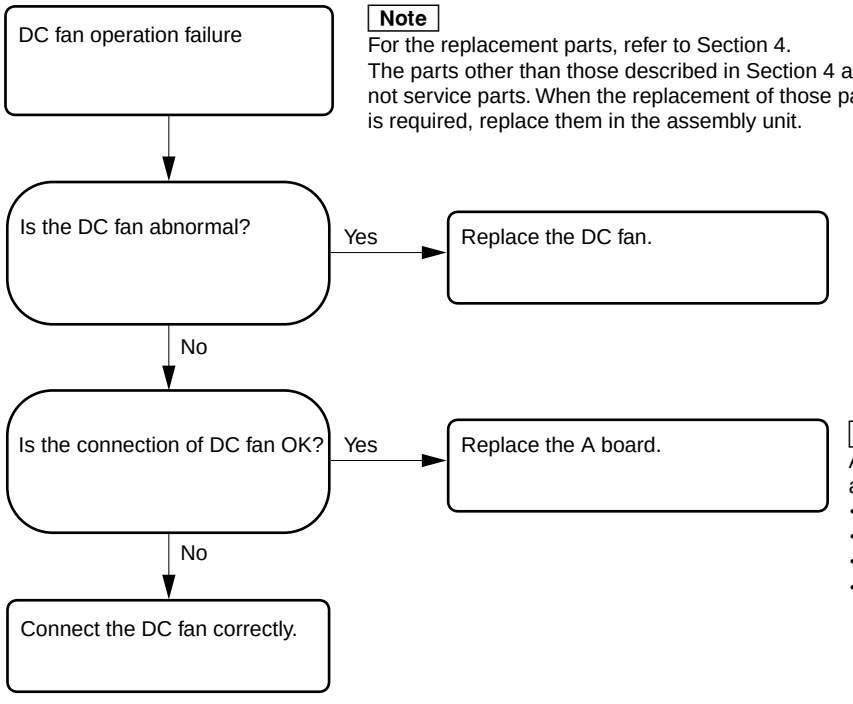
- AD calibration adjustment (Refer to Section 2.)
- White balance adjustment (Refer to Section 2.)
- EDID data input
- S-init Goods (Refer to Section 2.)

3-7. Other Trouble



Note
For the replacement parts, refer to Section 4.
The parts other than those described in Section 4 are not service parts. When the replacement of those parts is required, replace them in the assembly unit.

Note
After replacing the parts, perform the following adjustments.
- AD calibration adjustment (Refer to Section 2.)
- White balance adjustment (Refer to Section 2.)
- EDID data input
- S-init Goods (Refer to Section 2.)



Note
For the replacement parts, refer to Section 4.
The parts other than those described in Section 4 are not service parts. When the replacement of those parts is required, replace them in the assembly unit.

Note
After replacing the parts, perform the following adjustments.
- AD calibration adjustment (Refer to Section 2.)
- White balance adjustment (Refer to Section 2.)
- EDID data input
- S-init Goods (Refer to Section 2.)

3-8. Plasma Display Panel

3-8-1. Image is not displayed

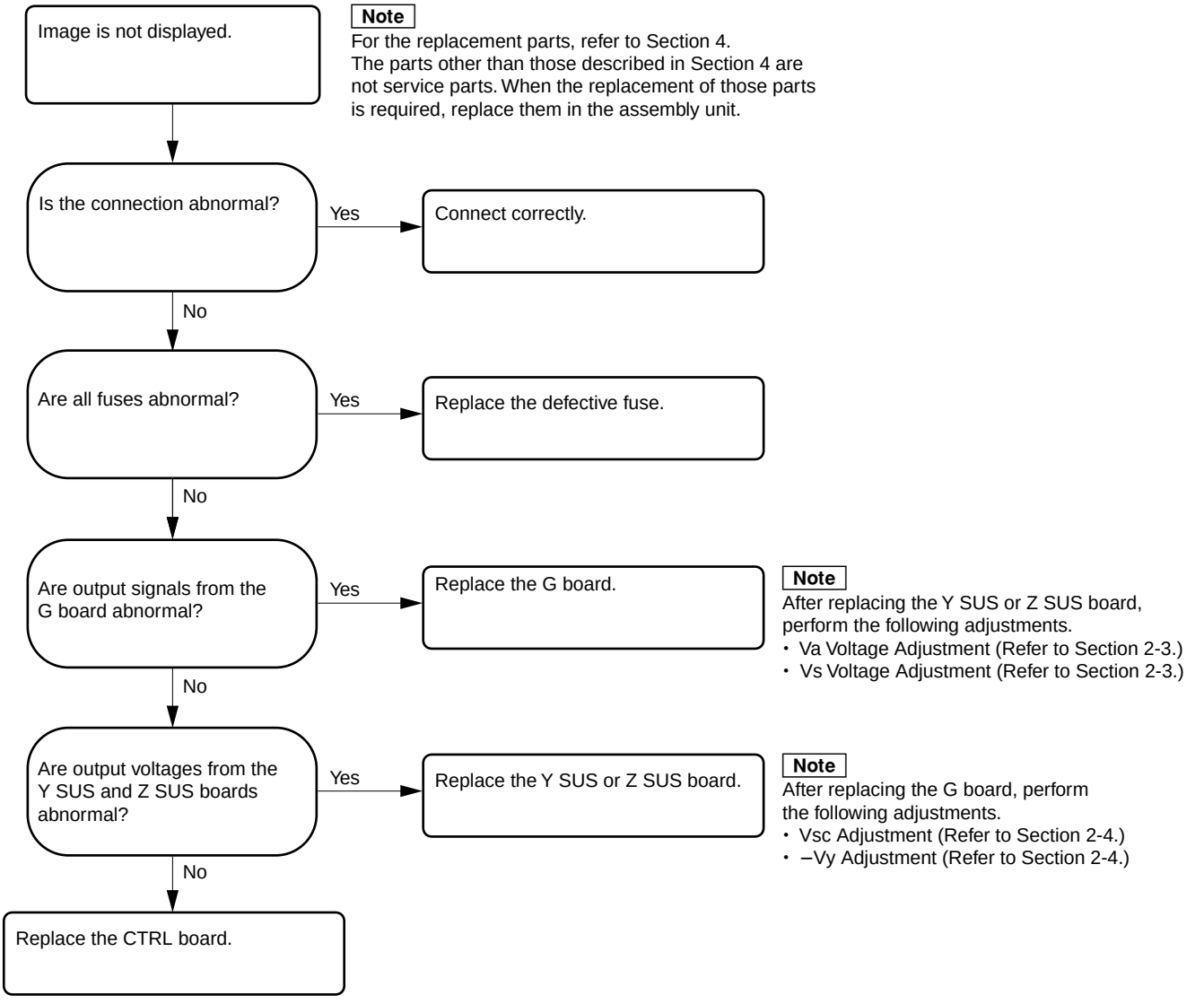
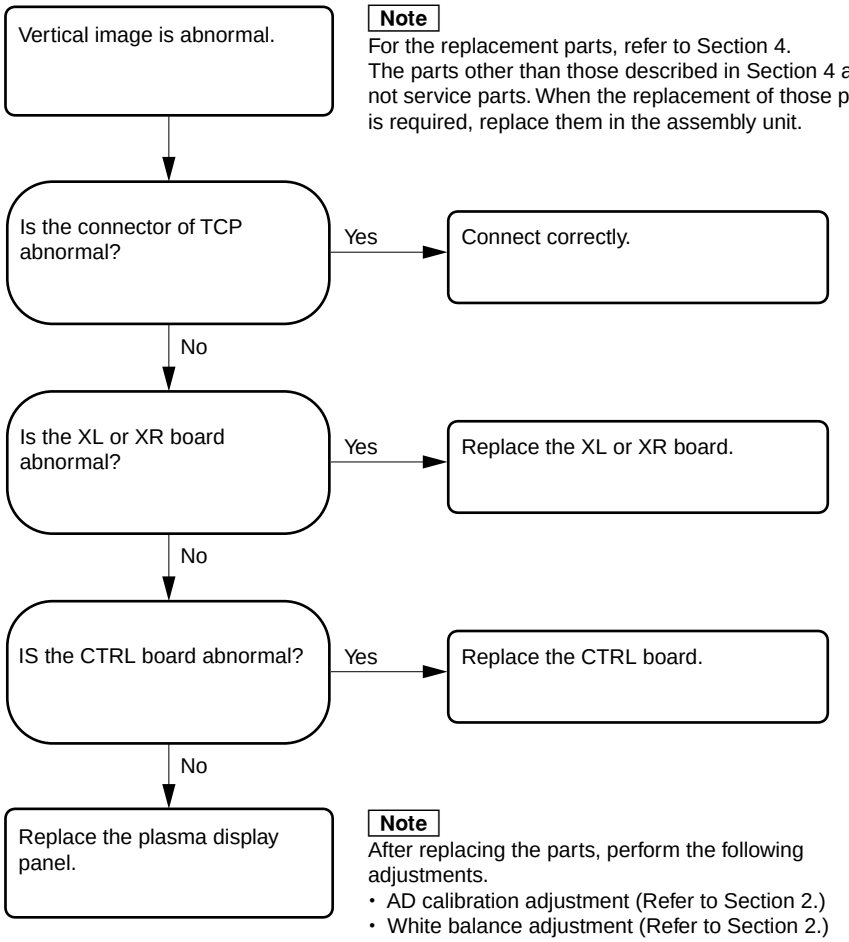


Image is not displayed.
Note
For the replacement parts, refer to Section 4.
The parts other than those described in Section 4 are not service parts. When the replacement of those parts is required, replace them in the assembly unit.
Is the connection abnormal?
Yes
Connect correctly.
No
Are all fuses abnormal?
Yes
Replace the defective fuse.
No
Are output signals from the G board abnormal?
Yes
Replace the G board.
Note
After replacing the Y SUS or Z SUS board, perform the following adjustments.
• Va Voltage Adjustment (Refer to Section 2-3.)
• Vs Voltage Adjustment (Refer to Section 2-3.)
No
Are output voltages from the Y SUS and Z SUS boards abnormal?
Yes
Replace the Y SUS or Z SUS board.
Note
After replacing the G board, perform the following adjustments.
• Vsc Adjustment (Refer to Section 2-4.)
• –Vy Adjustment (Refer to Section 2-4.)
No
Replace the CTRL board.

3-8-2. Vertical Image is abnormal



Note

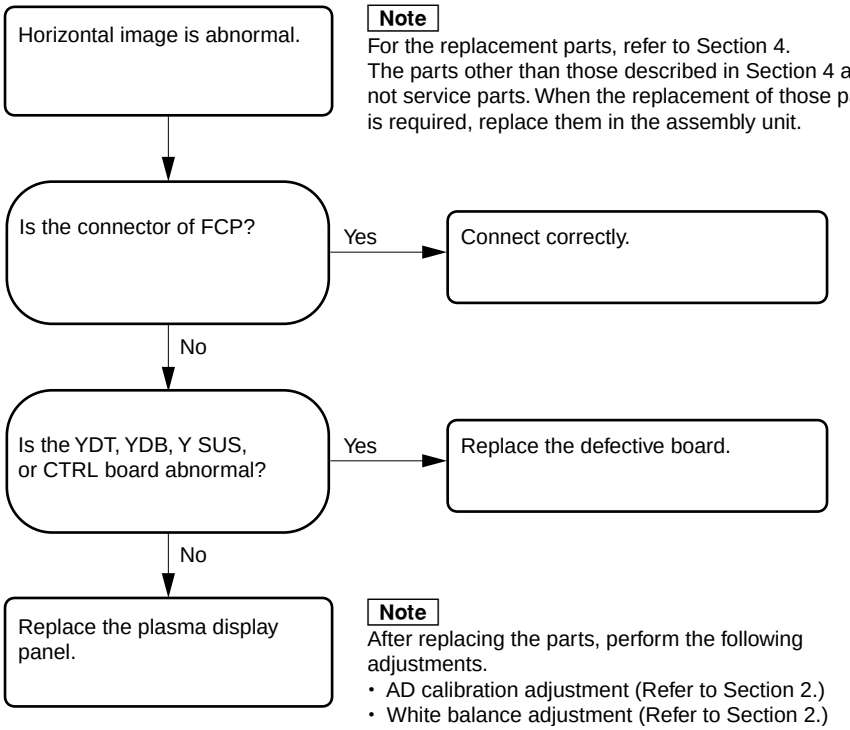
For the replacement parts, refer to Section 4.
The parts other than those described in Section 4 are not service parts. When the replacement of those parts is required, replace them in the assembly unit.

Note

After replacing the parts, perform the following adjustments.

- AD calibration adjustment (Refer to Section 2.)
- White balance adjustment (Refer to Section 2.)

3-8-3. Horizontal Image is abnormal



Note

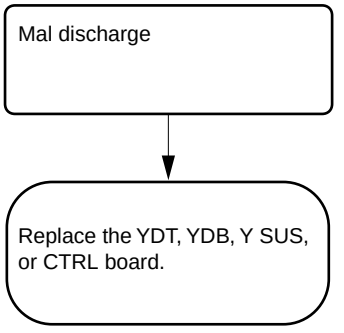
For the replacement parts, refer to Section 4.
The parts other than those described in Section 4 are not service parts. When the replacement of those parts is required, replace them in the assembly unit.

Note

After replacing the parts, perform the following adjustments.

- AD calibration adjustment (Refer to Section 2.)
- White balance adjustment (Refer to Section 2.)

3-8-4. Mal Discharge



Note

For the replacement parts, refer to Section 4.
The parts other than those described in Section 4 are not service parts. When the replacement of those parts is required, replace them in the assembly unit.

Note

After replacing the G board, perform the following adjustments.

- Vsc Adjustment (Refer to Section 2-4.)
- –Vy Adjustment (Refer to Section 2-4.)

Section 4
Spare Parts

4-1. Notes on Repair Parts

1. Safety Related Components Warning

WARNING

Components marked ⚠ are critical to safe operation. Therefore, specified parts should be used in the case of replacement.

2. Standardization of Parts

Some repair parts supplied by Sony differ from those used for the unit. These are because of parts commonality and improvement.
Parts list has the present standardized repair parts.

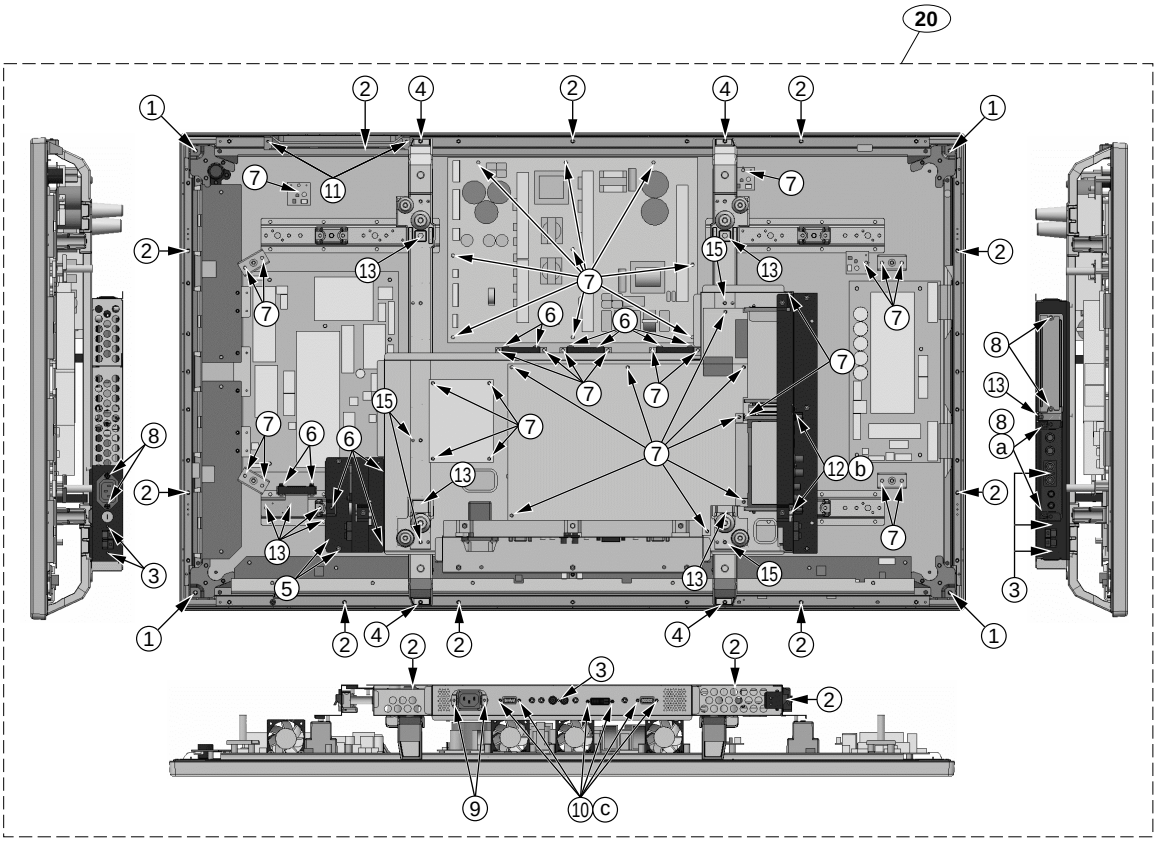
3. Stock of Parts

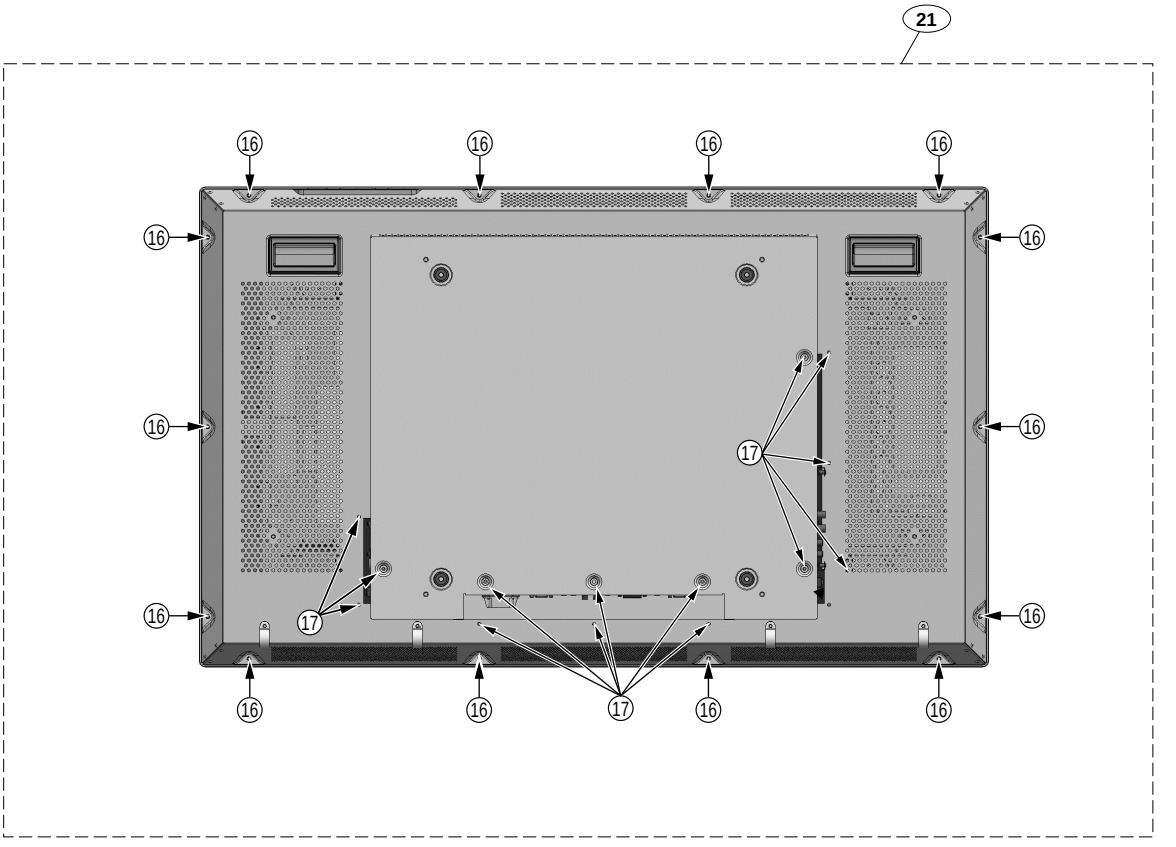
Parts marked with “o” at SP (Supply Code) column of the spare parts list may not be stocked. Therefore, the delivery date will be delayed.

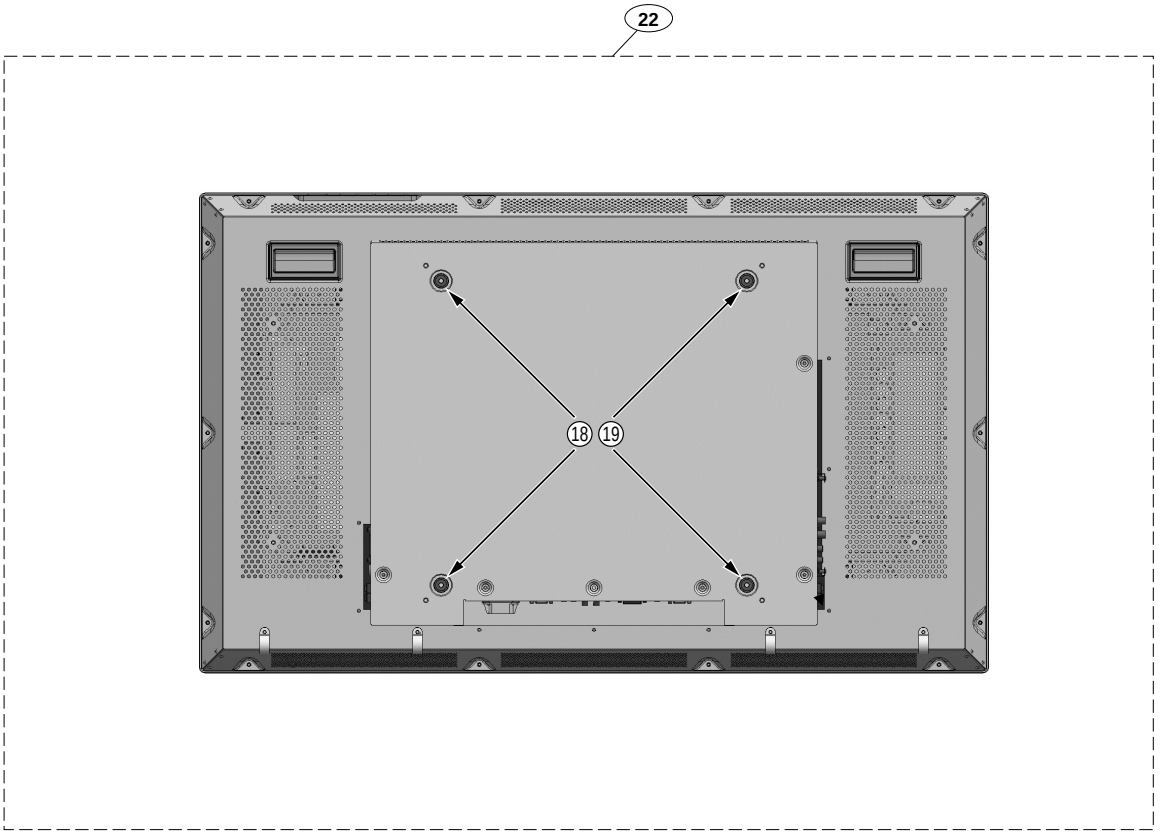
4. Harness

Harnesses with no part number are not registered as spare parts.
In need of repair, get components shown in the list and repair using them.

4-2. Exploded Views







Note : The screws can be ordered in units of screw kit. (Sony part No. 20 to 22)

No.	Part No.	SP	Description
20	X-2022-847-1	s	SCREW KIT, WALL MOUNT
21	X-2055-059-1	s	SCREW KIT (INSIDE)
22	X-2055-060-1	s	SCREW KIT (OUTSIDE)

INSIDE SCREW KIT

①	1SZZTMP007C
②	332-102C
③	332-113E
④	332-112E
⑤	339-006B
⑥	339-008F
⑦	339-008H
⑧	339-008K
⑨	339-008L
⑩	339-009C
⑪	332-095B
⑫	1SZZTMF012A
⑬	1SZZTMB005B
⑭	332-241A
⑮	332-241D
ⓐ	1NHB0302118
ⓑ	1WZZTKK005A
ⓒ	1SZZTMH005A

OUTSIDE SCREW KIT

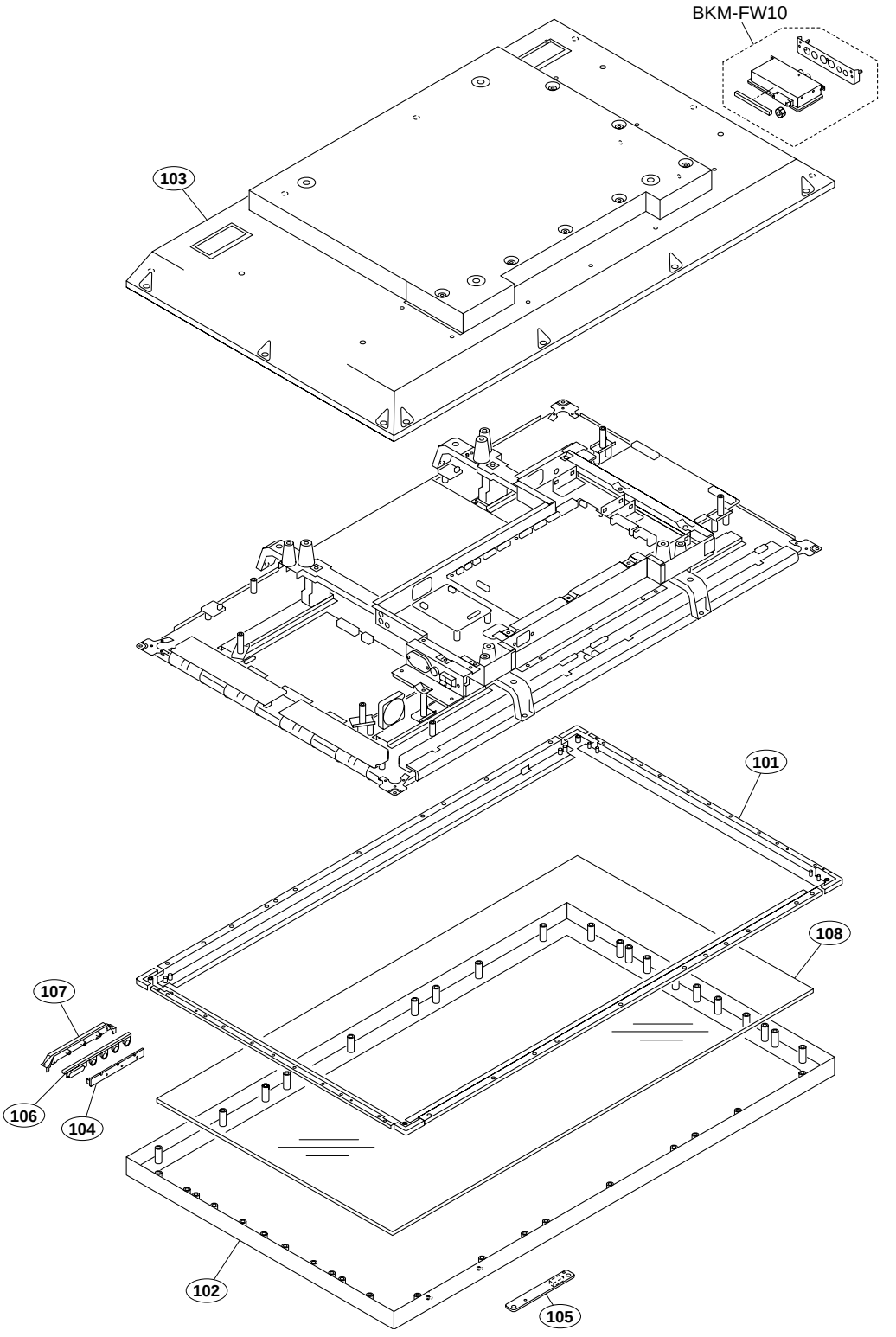
⑯	332-102R
⑰	339-008K

WALL MOUNT SCREW KIT

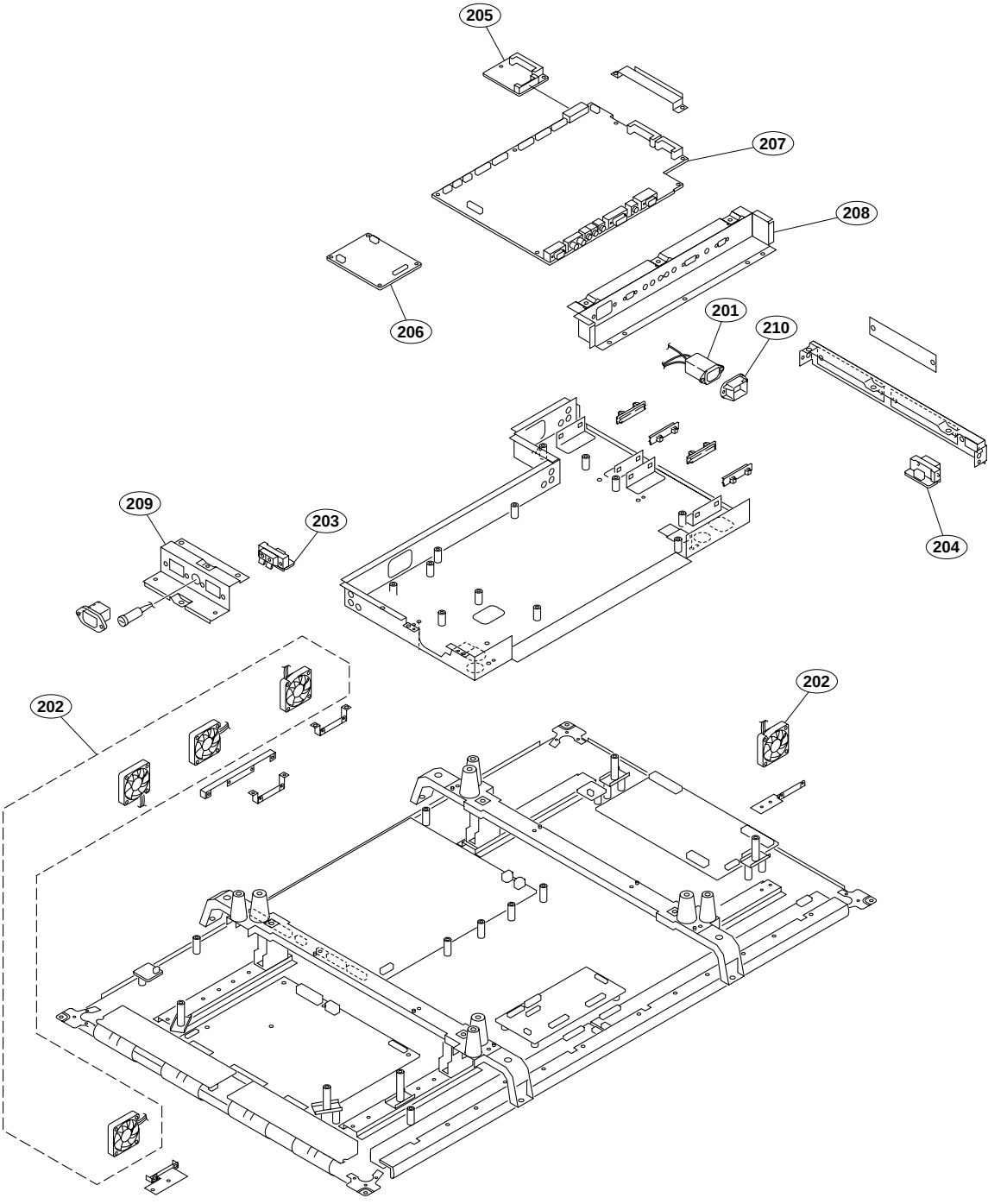
⑱	1WZZTKK004B
⑲	1SZZTMH003B

• The numbers encircled by round corresponds to numbers in illustrations.

Cover

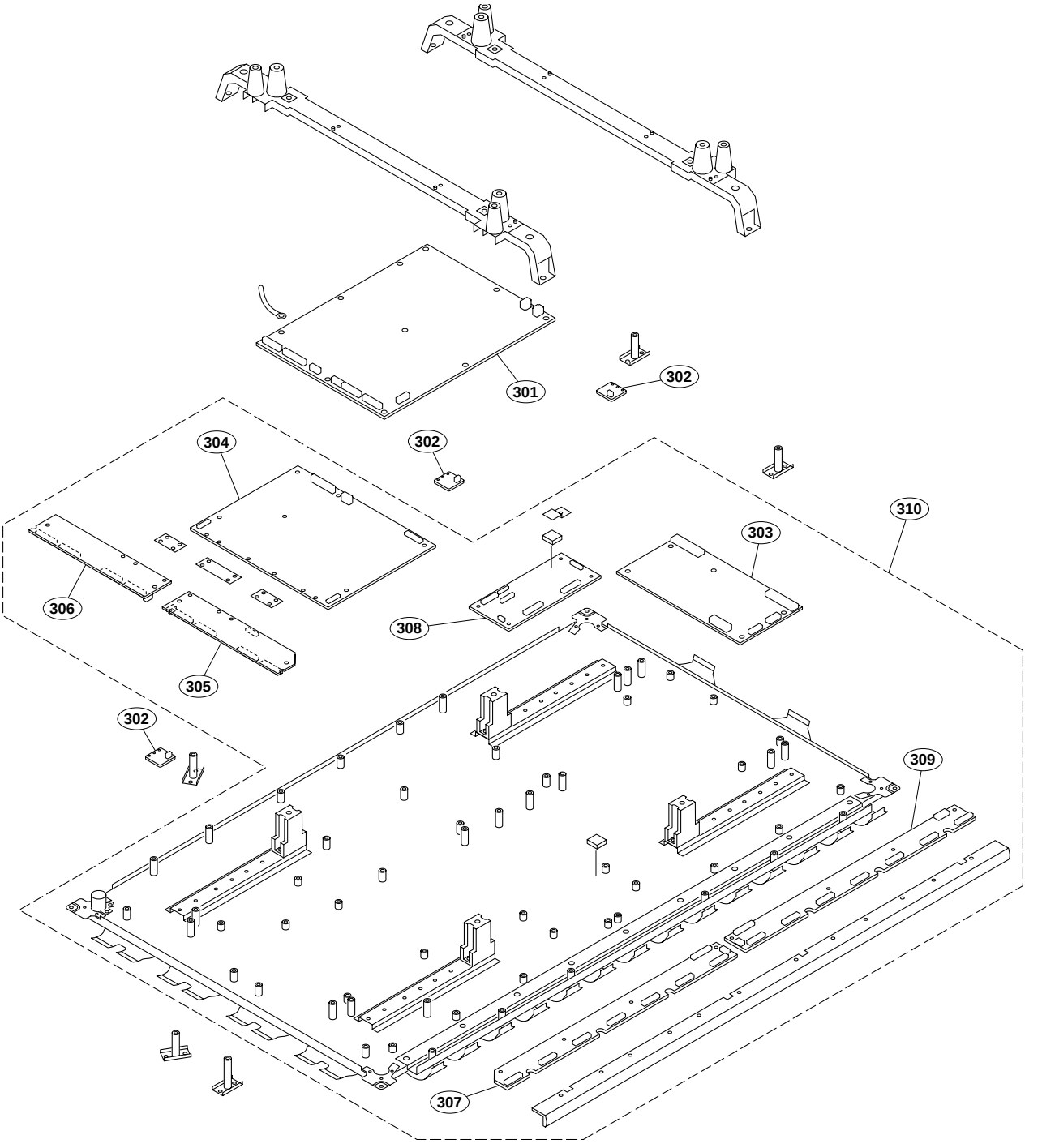


No.	Part No.	SP	Description
101	X-2024-229-1	s	ASSY,FRONT FRAME
102	X-2055-050-1	s	BEZEL ASSY (SILVER) (for FWD-42PV1/42PV1A)
	X-2055-051-1	s	BEZEL ASSY (BLACK) (for FWD-42PV1)
	X-2055-786-1	s	BEZEL ASSY (BLACK) (for FWD-42PV1P)
103	X-2055-052-1	s	REAR CABINET ASSY (for FWD-42PV1/42PV1P/42PV1A)
	X-2055-788-1	s	CABINET ASSY (for FWD-42PV1P)
104	1-789-198-11	s	MOUNTED CIRCUIT BOARD, H2
105	1-789-199-11	s	MOUNTED CIRCUIT BOARD, H1
106	2-591-335-01	s	BUTTON, CONTROL
107	2-591-336-01	s	BRACKET, CONTROL BUTTON
108	2-591-339-01	s	GLASS, FILTER

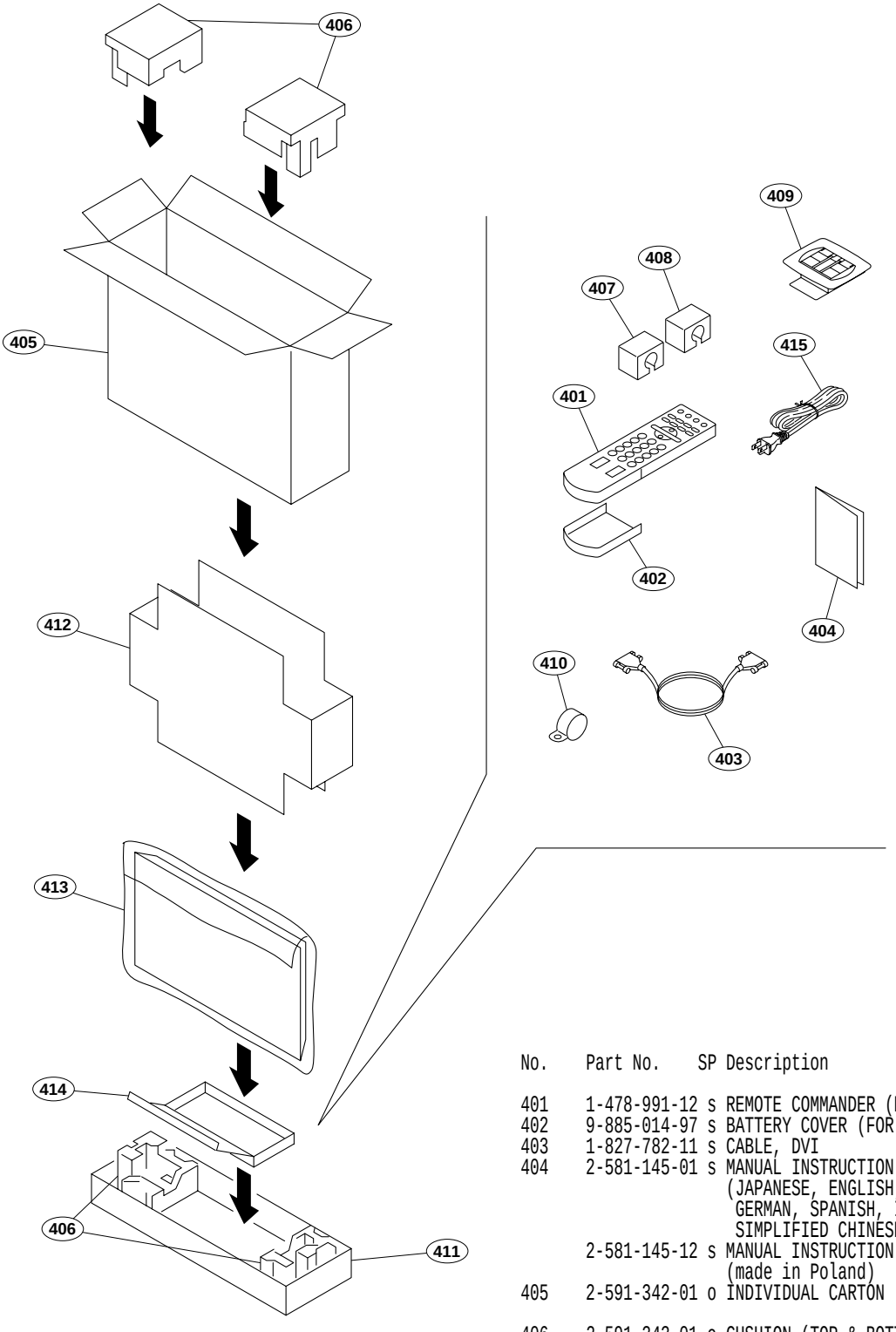


No.	Part No.	SP	Description
201	⚠ 1-417-398-21	s	AC INLET
202	1-787-338-11	s	FAN,DC
203	1-789-195-11	s	MOUNTED CIRCUIT BOARD, T-R
204	1-789-196-11	s	MOUNTED CIRCUIT BOARD, T-L
205	1-789-197-11	s	MOUNTED CIRCUIT BOARD, I
206	1-789-200-11	s	MOUNTED CIRCUIT BOARD, L
207	1-789-201-11	s	MOUNTED CIRCUIT BOARD, A
208	2-591-337-01	o	COVER, INTERFACE
209	2-591-338-01	s	COVER, AC OUTLET
210	2-990-241-02	s	HOLDER (A), PLUG

Panel

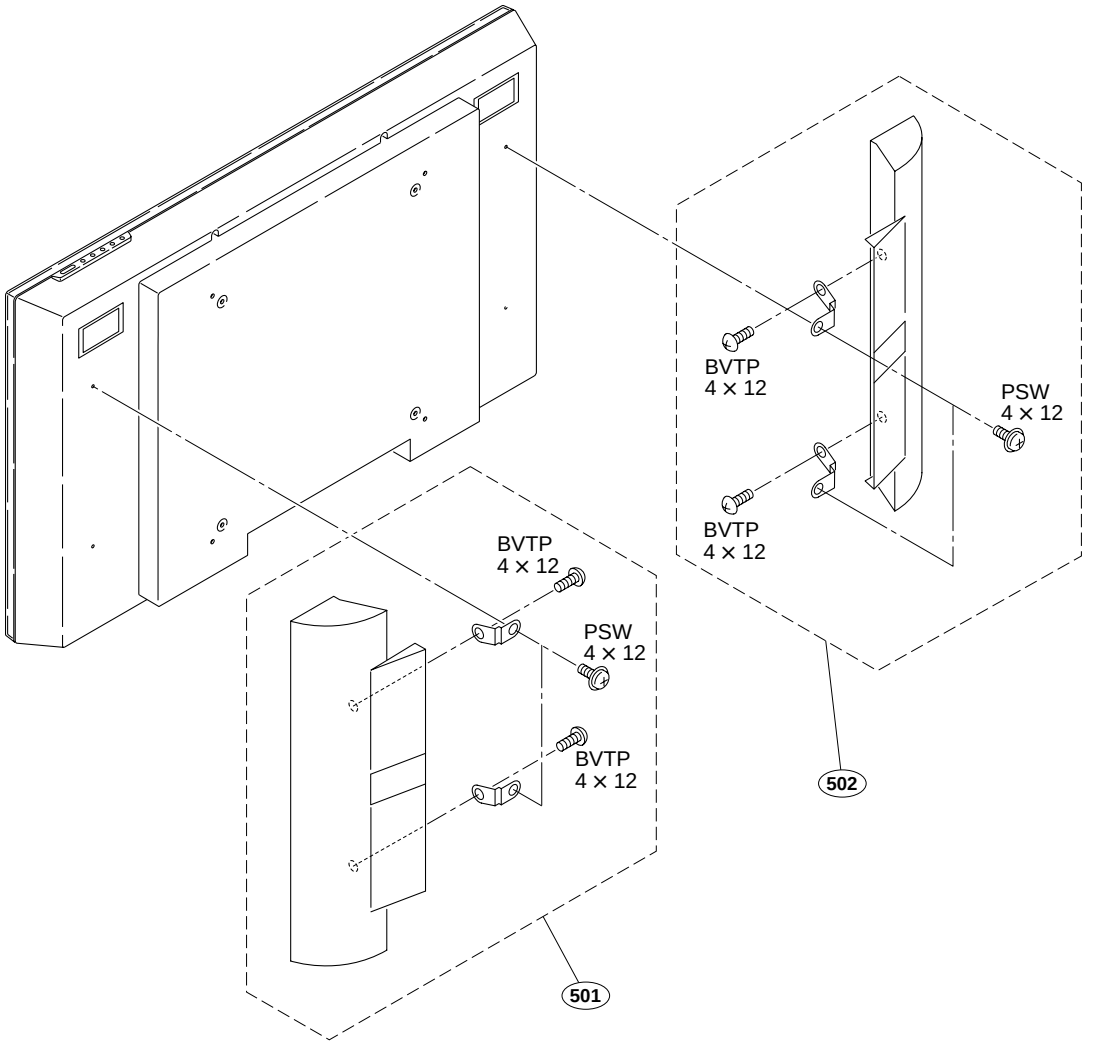


No.	Part No.	SP	Description
301	1-789-202-11	s	MOUNTED CIRCUIT BOARD, G
302	1-789-203-11	s	MOUNTED CIRCUIT BOARD, TEMP
303	1-789-204-11	s	MOUNTED CIRCUIT BOARD, Z SUS
304	1-789-205-11	s	MOUNTED CIRCUIT BOARD, Y SUS
305	1-789-206-11	s	MOUNTED CIRCUIT BOARD, YDB
306	1-789-207-11	s	MOUNTED CIRCUIT BOARD, YDT
307	1-789-208-11	s	MOUNTED CIRCUIT BOARD, XL
308	1-789-209-11	s	MOUNTED CIRCUIT BOARD, CTRL
309	1-789-210-11	s	MOUNTED CIRCUIT BOARD, XR
310	1-805-839-11	s	DISPLAY PANEL, PLASMA

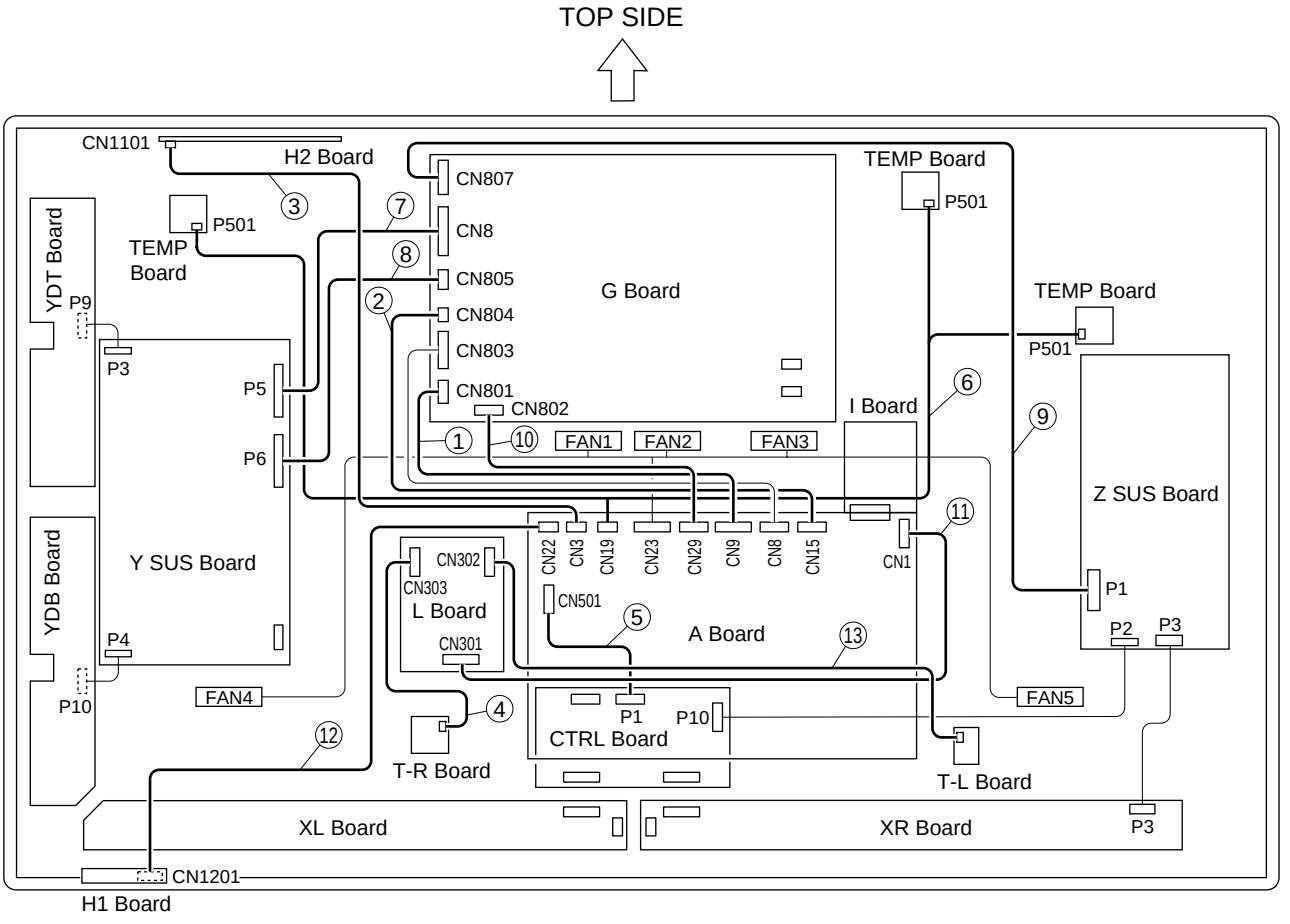


No.	Part No.	SP	Description
401	1-478-991-12	s	REMOTE COMMANDER (RM-980)
402	9-885-014-97	s	BATTERY COVER (FOR RM-980)
403	1-827-782-11	s	CABLE, DVI
404	2-581-145-01	s	MANUAL INSTRUCTION (JAPANESE, ENGLISH, FRENCH, GERMAN, SPANISH, ITALIAN, SIMPLIFIED CHINESE)
	2-581-145-12	s	MANUAL INSTRUCTION (made in Poland)
405	2-591-342-01	o	INDIVIDUAL CARTON
406	2-591-343-01	o	CUSHION (TOP & BOTTOM)
407	2-990-242-01	s	HOLDER (B),PLUG
408	3-613-640-01	o	HOLDER (C), PLUG
409	3-674-673-01	o	STOPPER (A)
410	4-101-214-01	s	HOLDER, CABLE
411	4-101-219-01	o	TRAY, BOTTOM
412	4-101-222-01	o	CARTON, INSIDE
413	4-101-223-01	o	BAG, PROTECTION
414	4-101-224-01	o	ACCESSORY BOX
415	⚠ ----------		CORD, POWER (See Sec.1-6. Warning on Power Connection)

SS-SP42FW (Option)



No.	Part No.	SP	Description
501	A-1081-102-A	s	SPEAKER ASSY (42R) (RP) (FOR SS-SP42FW/S (SILVER))
	A-1083-765-A	s	SPEAKER ASSY (42R) (RP) WHITE (FOR SS-SP42FW/W (PEARL WHITE))
502	A-1081-103-A	s	SPEAKER ASSY (42L) (RP) SILVER (FOR SS-SP42FW/S (SILVER))
	A-1083-766-A	s	SPEAKER ASSY (42L) (RP) WHITE (FOR SS-SP42FW/W (PEARL WHITE))
	7-682-963-09	s	SCREW +PSW 4X12(EP-FE/ZNBK/CM2)
	7-685-661-14	s	SCREW +BVTP4X12(EP-FE/CU,NI,CR)



No. Part No. SP Description

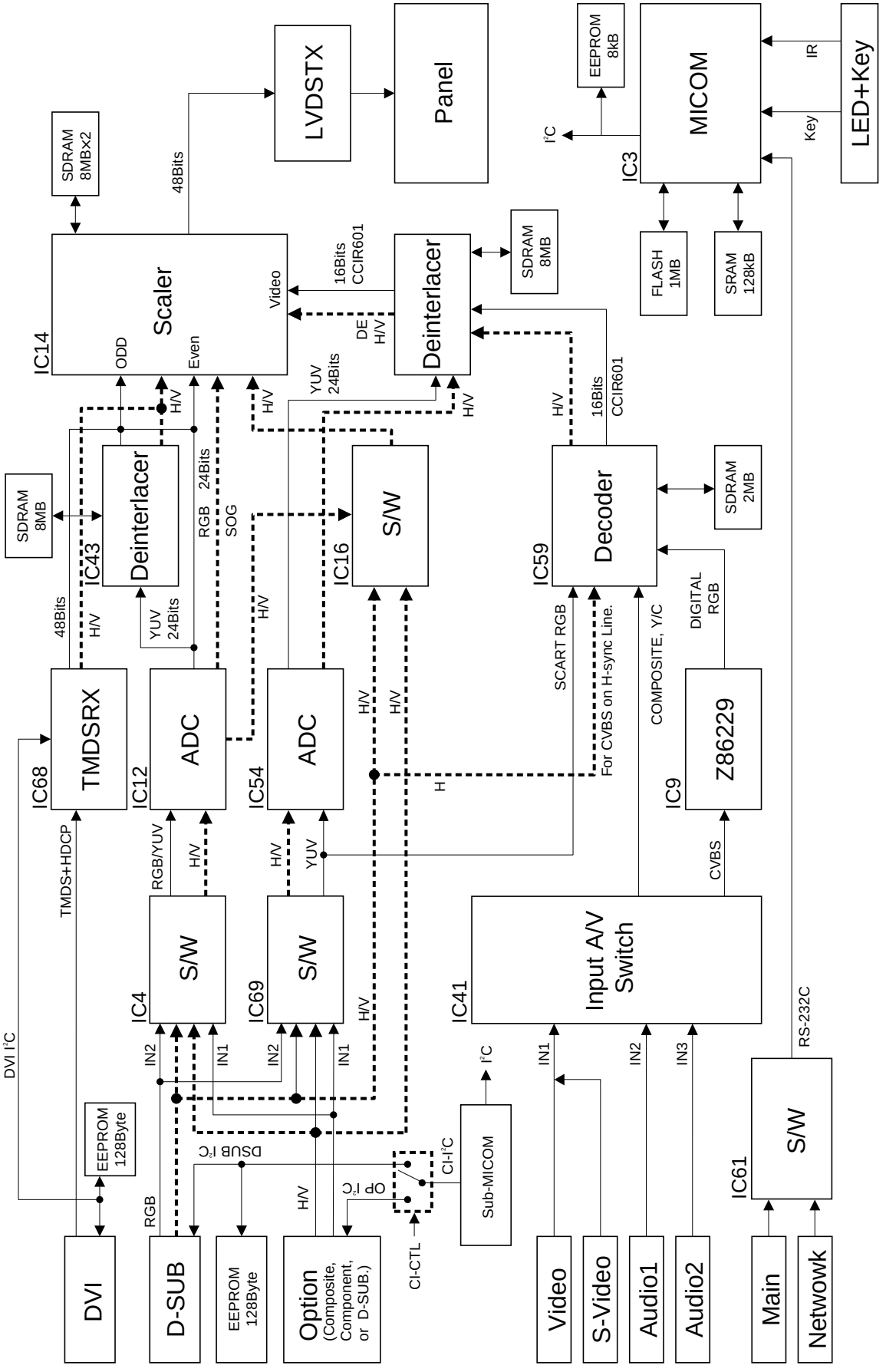
① 1-910-002-76 o CONNECTOR ASSY,12P MAIN
② 1-910-002-77 o CONNECTOR ASSY,7P MAIN
③ 1-910-002-81 o CONNECTOR ASSY,4P KEY
④ 1-910-002-84 o CONNECTOR ASSY,4P SPK R
⑤ 1-910-002-85 s CONNECTOR ASSY,LVDS

⑥ 1-910-002-86 o CONNECTOR ASSY,12P SENS
⑦ 1-910-012-50 o CONNECTOR ASSY 10P Y SUS
⑧ 1-910-012-51 o CONNECTOR ASSY 4P Y SUS
⑨ 1-910-012-52 o CONNECTOR ASSY 8P Z SUS
⑩ 1-910-012-55 o CONNECTOR ASSY 8P MAIN

⑪ 1-910-012-56 o CONNECTOR ASSY 12P AU
⑫ 1-910-012-57 o CONNECTOR ASSY 8P RMT
⑬ 1-910-012-59 o CONNECTOR ASSY 4P SPK L

- The numbers encircled by round corresponds to those of the left illustration.

Section 5
Block Diagram



FWD-42PV1 (SY)
FWD-42PV1P (SY)
FWD-42PV1A (SY) E
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